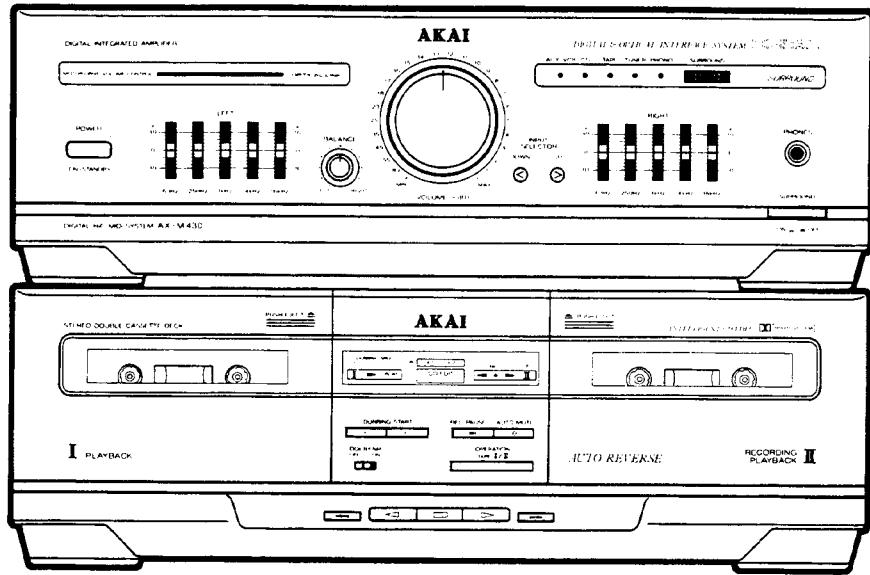


# AKAI SERVICE MANUAL



DIGITAL HIFI MIDI SYSTEM

MODEL **AX-M430**

## SPECIFICATIONS

### [AMPLIFIER section]

Power output .....	45 W + 45 W (6 ohms, EIAJ) 35 W + 35 W (6 ohms, DIN)
Music power .....	170 W
PMPO .....	400 W
THD .....	0.15 % (1kHz)
Frequency response .....	10 Hz to 100 KHz (10 Hz: -1.5 dB/100 KHz: -8 dB)
GEQ Center frequency ....	63 Hz, 250 Hz, 1 kHz, 4 kHz, 16 kHz
Adjust range .....	± 8 dB
S / N ratio (IHF-A).....	72 dB (PHONO MM) 85 dB (etc)
Required speaker .....	6 ohms to 16 ohms impedance (surround: 8 ohms to 16 ohms)
Input level / Impedance .....	
CD (optical) .....	-22 dBm
PHONO .....	1.8 mV / 47 kohms
AUX / VCR .....	90 mV / 47 kohms
D / A Converter .....	16 bit twin D / A converter
Digital filter .....	16 bit / 4fs

### [CASSETTE DECK section]

Frequency response .....	Normal tape ..... 30 Hz to 14 KHz CrO2 tape ..... 30 Hz to 15 KHz
Wow & flutter .....	TAPE I ..... 0.09% (WRMS) 0.18% (DN) TAPE II ..... 0.06% (WRMS) 0.14% (DN)
Heads .....	TAPE I ..... HD head for Playback head x1 TAPE II ..... HD head for PB/REC head x1 Erase head x1
Dimensions .....	360 (W) x 236 (H) x 315 (D) mm
Weight .....	7.7 kg

### Standard accessories

Remote control unit .....	x 1
Batteries .....	x 2
Operator's manual .....	x 1

\*For improvement purposes, specifications and design are subject to change without notice.

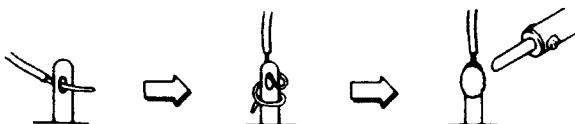
\*Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY" and  symbol are trademarks of Dolby Licensing Corporation.

# ★ SAFETY INSTRUCTIONS

## PRECAUTIONS DURING SERVICING

1. Parts identified by the ! (\*) symbol are critical for safety. Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
3. Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
4. Use specified internal wiring. Note especially:
  - 1) Wires covered with PVC tubing
  - 2) Double insulated wires
  - 3) High voltage leads
5. Use specified insulating materials for hazardous live parts. Note especially:
  - 1) Insulation Tape
  - 2) PVC tubing
  - 3) Spacers (insulating barriers)
  - 4) Insulation sheets for transistors
  - 5) Plastic screws for fixing microswitch (especially in turntable)
6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).

## ★ INFORMATION

### SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

Symbol	Principal Destinations
B	UK
E	Europe (except UK)
S	Australia
V	Germany
U	Universal Area
Y*	Custom version

### PRECAUTION BEFORE/AFTER REPAIRING THE UNIT

#### [ABOUT THE POWER SUPPLY]

Power supply of the AX-M430 is controlled by the tuner. Therefore when repair of the AX-M430 is necessary, repair should be made together with the tuner.

7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

### SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.

The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15  $\mu$ F capacitor, under the unit's normal working conditions. The leakage-current should be less than 0.5 mA rms AC.

The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 Mohms.

### MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as small accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can.



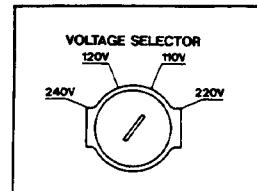
Please leave them at an appropriate depot. All other household batteries can be thrown out with the household waste.

To repair the AX-M430 without tuner, use the following procedure.

- 1) While pushing the PLAY (▶) button, press the POWER button to turn the power of the AX-M430 on.
- 2) To turn off the power of the AX-M430 the AC power cord must be disconnected.

### VOLTAGE CONVERSION (U Model only)

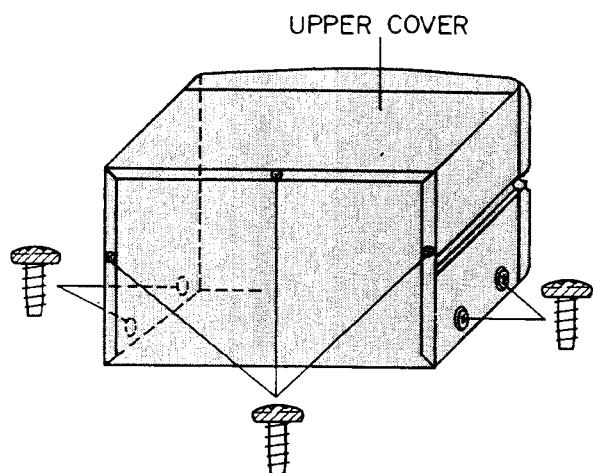
Before connecting the cord. Set the VOLTAGE SELECTOR located on the rear panel so that the correct voltage for your area is indicated.



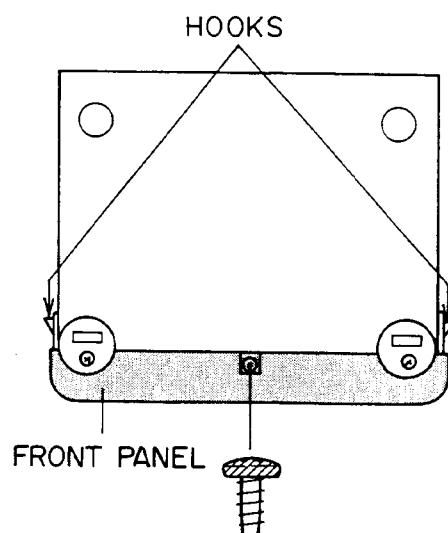
# I. DISASSEMBLY

In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations. Reassemble in reverse order.

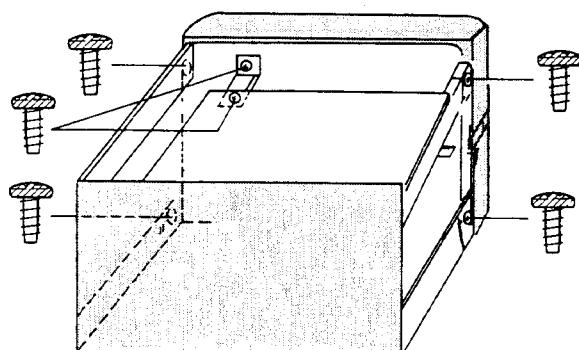
## 1. Removal of UPPER COVER



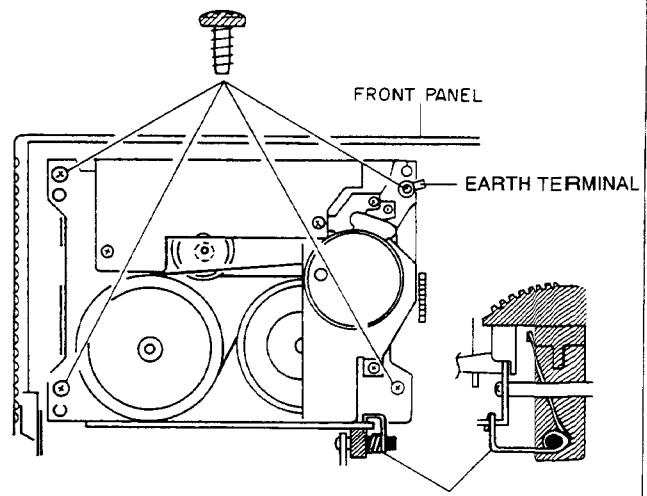
## 3.



## 2. Removal of the FRONT PANEL BLOCK



## 4. Removal of the CASSETTE MECHA BLOCK



- 1) Disconnect all connectors (except J10) connected to the front panel.

- 1) Unhook the EJECT TORSION SPRING
- 2) Removal the four MECHA BLOCK fixation screws.

## II. PRINCIPAL PARTS LOCATION

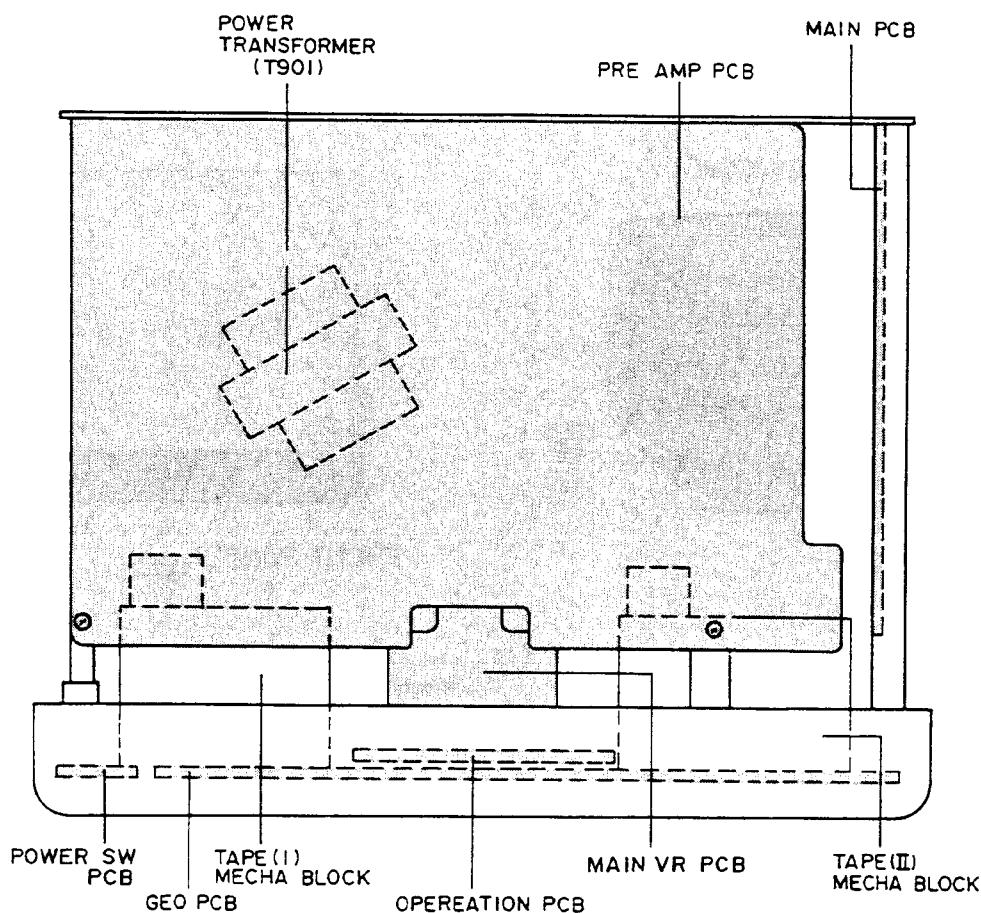


Fig. 2-1 Top view

## III. MECHANICAL ADJUSTMENT

### [PRECAUTION]

- \* Before adjustment, clean and de-magnetize the heads and tape guides.
- \* Do not use the magnetized tools for the following adjustment.

### 3-1. CONFIRMATION OF THE WINDING TORQUE IN EACH MODE

Insert a CASSETTE TORQUE METER (AT-751179) and measure the torque in each mode. For fast forward and rewind, measure the torque at the end of the tape when tape has stopped running.

#### [PLAY BACK mode]

Take up torque: 35 to 75 g-cm  
Back tension torque: 2 to 6 g-cm

#### [FAST FORWARD and REWIND mode]

Take up torque: 70 to 160 g-cm

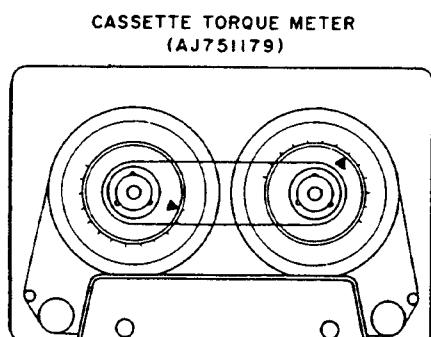


Fig.3-1

### 3-2. ADJUSTMENT OF THE TAPE GUIDE HEIGHT (TAPE II)

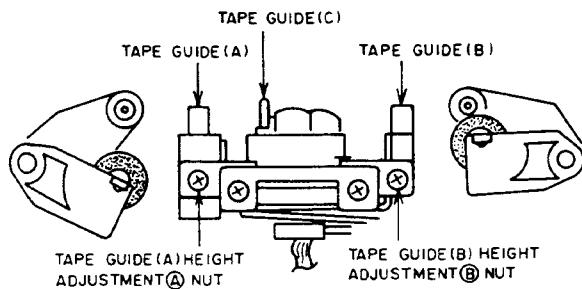


Fig. 3-2

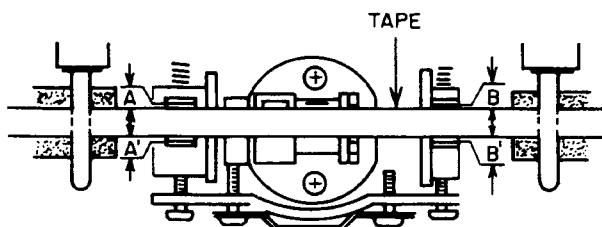


Fig. 3-3

- 1) Load the MIRROR CASSETTE TAPE (AJ-751178) and engage the FWD PLAY mode.
- 2) Adjust TAPE GUIDE (A) HEIGHT ADJUSTMENT Ⓐ screw so that both spaces (A and A') on the TAPE GUIDE (A) are equal.
- 3) Adjust TAPE GUIDE (B) HEIGHT ADJUSTMENT Ⓑ screw so that both spaces (B and B') on the TAPE GUIDE (B) are equal.
- 4) Repeat above 2) and 3) until tape runs smoothly and without any curls or wrinkle at the TAPE GUIDE (A), (B) and (C).
- 5) After adjustment, paint-lock the adjustment Ⓐ and Ⓑ screw.

### 3-3. ADJUSTMENT OF THE PB HEAD AZIMUTH ALIGNMENT (TAPE I)

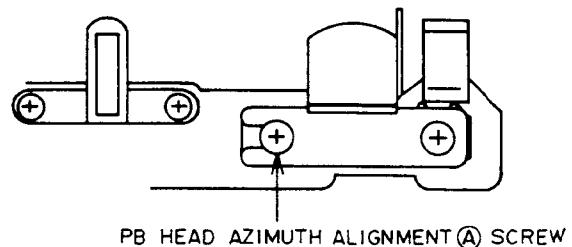


Fig. 3-4

- 1) Connect the AC milli-voltmeters to L-ch. and R-ch of the VCR/AUX OUT on the amplifier and connect oscilloscope's input CH-1 and CH-2 to output of the AC milli-voltmeters.
- 2) Play back a 10 kHz (-15 dB), HEAD AZIMUTH ALIGNMENT test tape (AT-750778) and adjust Ⓐ screw so that the reading on the AC milli-voltmeters are at maximum and waveforms on the oscilloscope are in the same phase.
- 3) After adjustment, paint-lock the adjustment Ⓐ screw.

### 3-4. ADJUSTMENT OF THE REC/PB HEAD AZIMUTH ALIGNMENT (TAPE II)

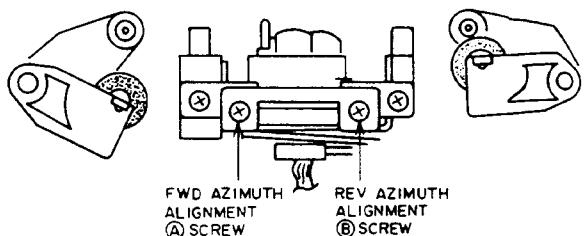


Fig. 3-5

- 1) Connect the AC milli-voltmeters to L-ch. and R-ch of the VCR/AUX OUT on the amplifier and connect oscilloscope's input CH-1 and CH-2 to output of the AC milli-voltmeters.
- 2) Play back a 10 kHz (-15 dB), HEAD AZIMUTH ALIGNMENT test tape (AT-750778) and adjustment Ⓐ (FWD PLAY) or Ⓑ (REV PLAY) SCREW so that the reading on the AC milli-voltmeters are at maximum and waveforms on the oscilloscope are in the same phase.
- 3) After adjustment, paint-lock the adjustment Ⓐ and Ⓑ screws.

## IV. ELECTRICAL ADJUSTMENT

### [PRECAUTIONS BEFORE ADJUSTMENT]

1. Before adjustment, clean and de-magnetize heads and tape guides.

STEP	ADJUSTMENT ITEM
1.	TEST TAPE/INPUT SIGNAL
2.	MODE
3.	TEST POINT/ADJUSTMENT PART
4. (•) REMAKERS, (*) RESULT	

↓  
Adjustment Part

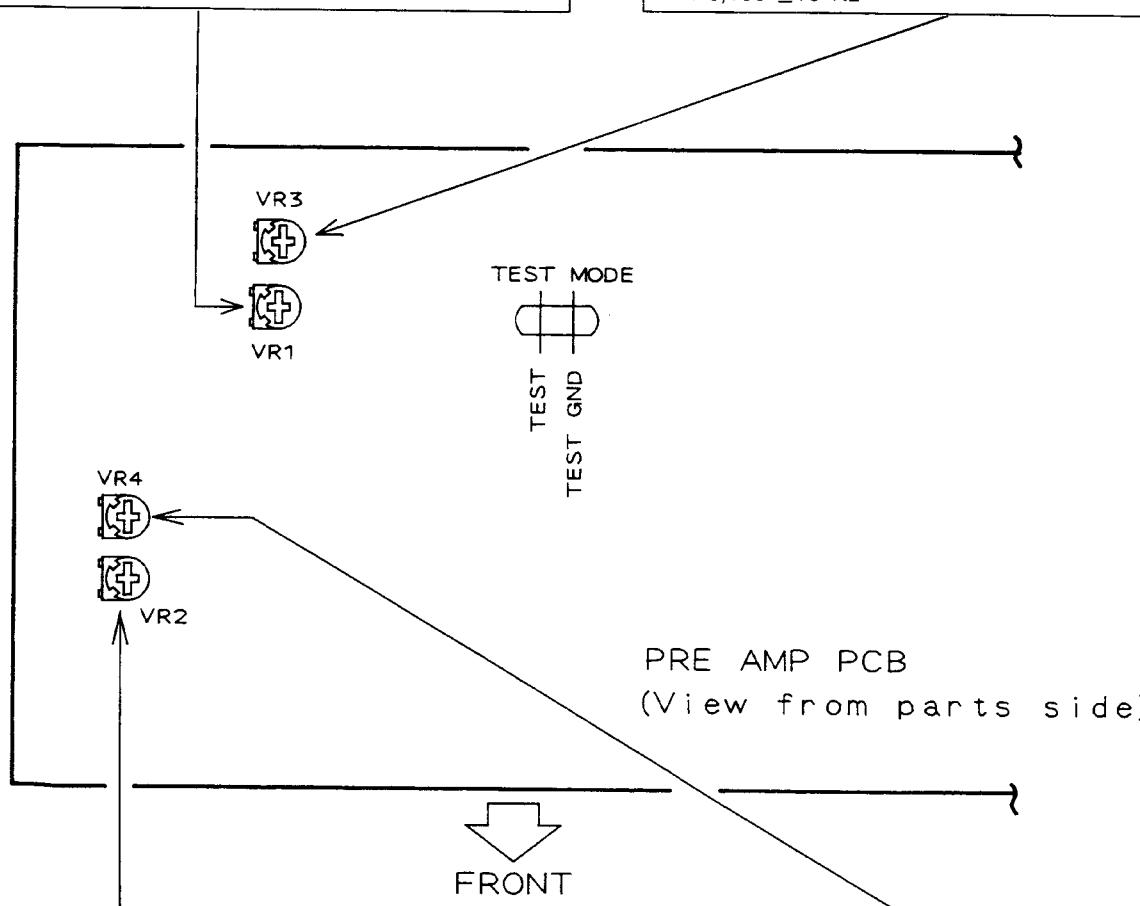
### ABOUT THE TEST MODE

Be sure to engage the test mode before proceeding with electrical adjustment

1. To engage the test mode, short the TEST AND TEST GND
2. The "CD EDIT" indicator will appear on the front panel
3. To disengage the test mode turn the power off

1	TAPE I (X2) TAPE SPEED
1.	3,150 Hz test tape (AT-751263)
2.	PLAY (Push x 2 DUBBING START button)
3.	AUX / VCR OUT / VR 1
4. •	Connect a frequency counter to AUX / VCR OUT. * $6,300 \pm 20$ Hz

2.	TAPE I NORMAL TAPE SPEED
1.	3,150 Hz test tape (AT-751263)
2.	PLAY
3.	AUX / VCR OUT / VR 3
4. •	Connect a frequency counter to AUX / VCR OUT. * $3,150 \pm 10$ Hz



3.	TAPE II (X2) TAPE SPEED
1.	3,150 Hz test tape (AT-751263)
2.	PLAY (Push X2 DUBBING START button)
3.	AUX / VCR OUT / VR 2
4. •	Connect a frequency counter to AUX / VCR OUT. * 5 Hz to 10 Hz lower than the result in STEP 1 [TAPE I (X2) TAPE SPEED]

4.	TAPE II NORMAL TAPE SPEED
1.	3,150 Hz test tape (AT-751263)
2.	PLAY
3.	AUX / VCR OUT / VR 4
4. •	Connect a frequency counter to AUX / VCR OUT. * 5 Hz to 10 Hz lower than the result in STEP 2 [TAPE I NORMAL TAPE SPEED]

## V. PARTS LIST

### ATTENTION

1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

### HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

#### 2. HEAD BASE BLOCK

Ref. No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

#### 6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMV V 223M 250AC [U.E.B.S.]
C1B	EC-350949	C MMV V 223M 250DC [J]
C1C	EC-338397	C MMV V 223M 125AC [CA]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] : AAL (U.S.A) [S] : SAA (Australia)  
[B] : BEAB (England) [U] : U/T (Universal Area)  
[C] : CSA (Canada)  
[E] : CEE (Europe) [V] : VDE (W. Germany)  
[J] : JPN (Japan) [Y] : Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

### WARNING

 (\*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

### AVERTISSEMENT

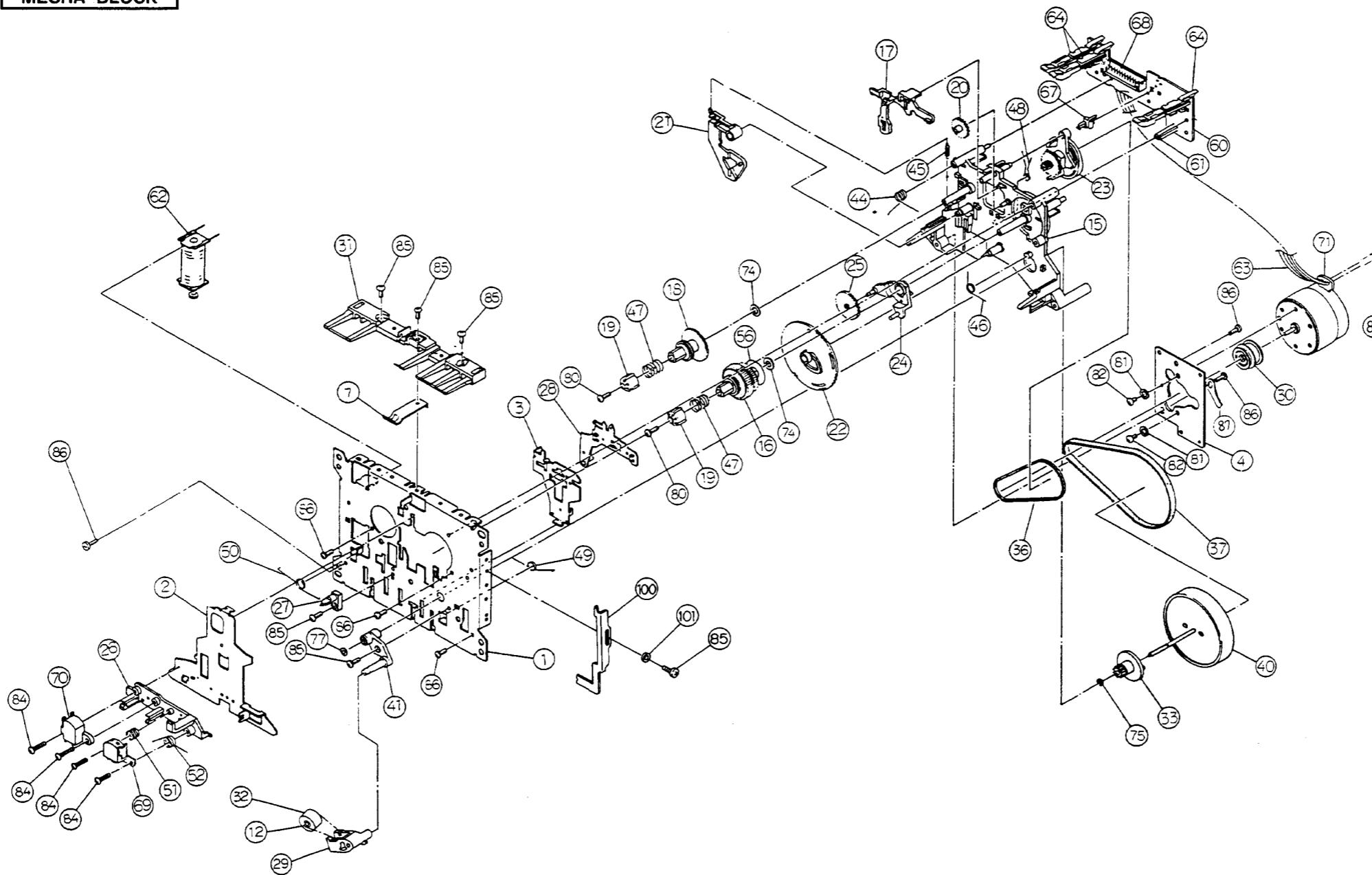
 (\*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

## 1.RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
1	AX-401055M	REMOCON RC-S630	63	ES-390620J	SW SLIDE SSSF 01-02N
2	BB-401096M	MECHA GAK-5PB-2	64	ES-394736J	[DOLBY]
		[TAPE-1]	65	ES-394818J	SW TACT SOA-133HS
3	BB-403466M	MECHA GAK3603D			[INPUT SELLECTOR UP]
		[TAPE-2]	66	ET-732427M	SW TACT SOR-123HS T05
4	BM-729992J	MOTOR EG-530KD-2B	67	ET-356336	[REC PAUSE]
5	BM-729993J	MOTOR EG-530YD-2B	68	ET-369248	DETECTOR NJL5165K
6	*BT-403288M	TRANS POW C1028-BS	69	ET-373382	TR DTA114ES
		[B,S]	70	ET-354415	TR DTA114YS
7	*BT-403287M	TRANS POW C1028-EV	71	ET-353897	TR DTA143ZS
		[E,V]	72	ET-360399	TR DTC114ES
8	*BT-403286M	TRANS POW C1028-U	73	ET-354365	TR DTC114TS
		[U]	74	ET-354371	TR DTC124ES
9	EC-389414J	C CE V DE7 B102K 400AC	75	ET-373392	TR DTC124XS
10	*EC-388496	C CE V DE7 FZ 472P 400AC	76	ET-354364	TR DTC143TS
11	EC-383075J	C EC V CUT SME 332M 35.0DC	77	ET-373391	TR DTC143ZS
12	ED-394723J	D LED GL3HY44 YELLOW	78	ET-354414	TR DTC144ES
13	ED-405359J	D LED SEL2915A C,D ORANGE	79	ET-394570J	TR DTC144TS
14	ED-382365J	D LED SLR-34VC3F RED	80	ET-353899	TR 2SA1038 S T05
15	ED-394416J	D LED SLV-31VT3F RED	81	ET-352726	TR 2SA1317 S,T,U
16	*ED-357036	D SILICON DBA20B-K15 100/ 2.0A	82	ET-400965J	TR 2SA1392 T,U
17	ED-307572	D SILICON H 1SS131	83	ET-394571J	TR 2SB1357 E,F T05
18	ED-624903	D SILICON H 1S2473	84	ET-397160J	TR 2SC2389 S,E T05
19	*ED-403291J	D SILICON RS403-SC51 200/ 4.0A	85	ET-397152J	TR 2SC3330 R,S,T,U,V
20	*ED-511907	D SILICON 1N4002 100/1.0A	86	ET-400741J	TR 2SC3382 T,U
21	ED-391003J	D ZENER H HZS4C3	87	ET-366581	TR 2SC3708 T T05
22	ED-367520	D ZENER H HZS5.6B3J F05	88	ET-401091J	TR 2SD1762 E,F
23	ED-364033	D ZENER H HZS6.8B3J F05	89	ET-396072J	TR 2SD2144S U,V,W T05
24	ED-346558	D ZENER H HZ12B1L	90	EV-403297J	TR 2SD2159 V,W
25	ED-346560	D ZENER H HZ12B3L	91	EV-403298J	VR ROTARY RK11K1130 SP104
26	ED-346627	D ZENER H HZ33 2	92	EV-403299J	[BALANCE VR]
27	ED-307610	D ZENER H HZ7 A2	93	HR-732436J	VR SLIDE RS15H113D B104
28	ED-346604	D ZENER H HZ7 B2	94	HR-732431M	VR SPL *C1028 B104X2
29	*EF-359007	FUSE BET T 250V 1.25A	95	MB-732415M	[MAIN VR]
30	*EF-364518	FUSE BET T 250V 2.50A	96	MB-732454J	HEAD RP BLK HX-M800W
31	*EF-359086	FUSE BET T 250V 4.00A	97	MB-732416M	HEAD RP MS15R-AA2N4
32	*EF-355374	FUSE BET T 250V 500MA	98	MB-732574J	CLUTCH BELT (C)
33	*EF-358641	FUSE BET T 250V 800MA	99	MP-732411J	CLUTCH BELT (F)
34	EI-367572	IC BA15218	100	MP-732450J	DRIVE BELT
35	EI-389322J	IC CXA1101P	101	MP-732449J	DRIVE BELT
36	EI-394572J	IC CXA1115BP			PINCH ROLLER
37	EI-394574J	IC LA2000			PINCH ROLLER (L) ASSY
38	EI-359053	IC LA3600			PINCH ROLLER (R) ASSY
39	EI-393325J	IC M5218AP			
40	EI-394569J	IC M66312P			
41	EI-401056J	IC PD0029			
42	EI-390594J	IC PD0052			
43	*EI-394709J	IC STK4142-2			
44	EI-302233	IC TC4051BP			
45	EI-200573	IC TC4053BP			
46	*EI-377101	IC UPC7805HF			
47	EI-394518J	IC UPD6376CX			
48	EI-403294J	IC UPD75112CW FX2DKA1-119			
49	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ			
50	EJ-394459J	SOCKET OPTICAL GP1F32R			
		[CD OPTICAL IN]			
51	EJ-394442J	SOCKET 52303-1211 12P			
		[CD JACK]			
52	EJ-394445J	SOCKET 52303-1411 14P			
		[TUNER JACK]			
53	*EO-394826J	COIL LF LF-2C			
54	EO-403296J	COIL OSC 1 C1028 100.0KHZ			
55	EO-356809	COIL TUN 1 100Z-121 100.00KHZ			
56	*EQ-394450J	RELAY POW DG12D1-O(M) 12V			
		[U]			
57	*ER-328278	R FUSE H ERD2FC 1/4W 10R0G			
58	*ER-200746	R FUSE H ERD2FC 1/4W 1000G			
59	ES-732430M	SW LEAF LSA-1114F			
60	ES-732429M	SW LEAF LSA-1146-2AU			
61	ES-403293J	SW PUSH SPUL19310A 2-02-02S			
		[SURROUND SW]			
62	*ES-349070	SW SELECTOR YKS11-0002 02-4			
		[U]			

**MECHA BLOCK**



**2. MECHA BLOCK**

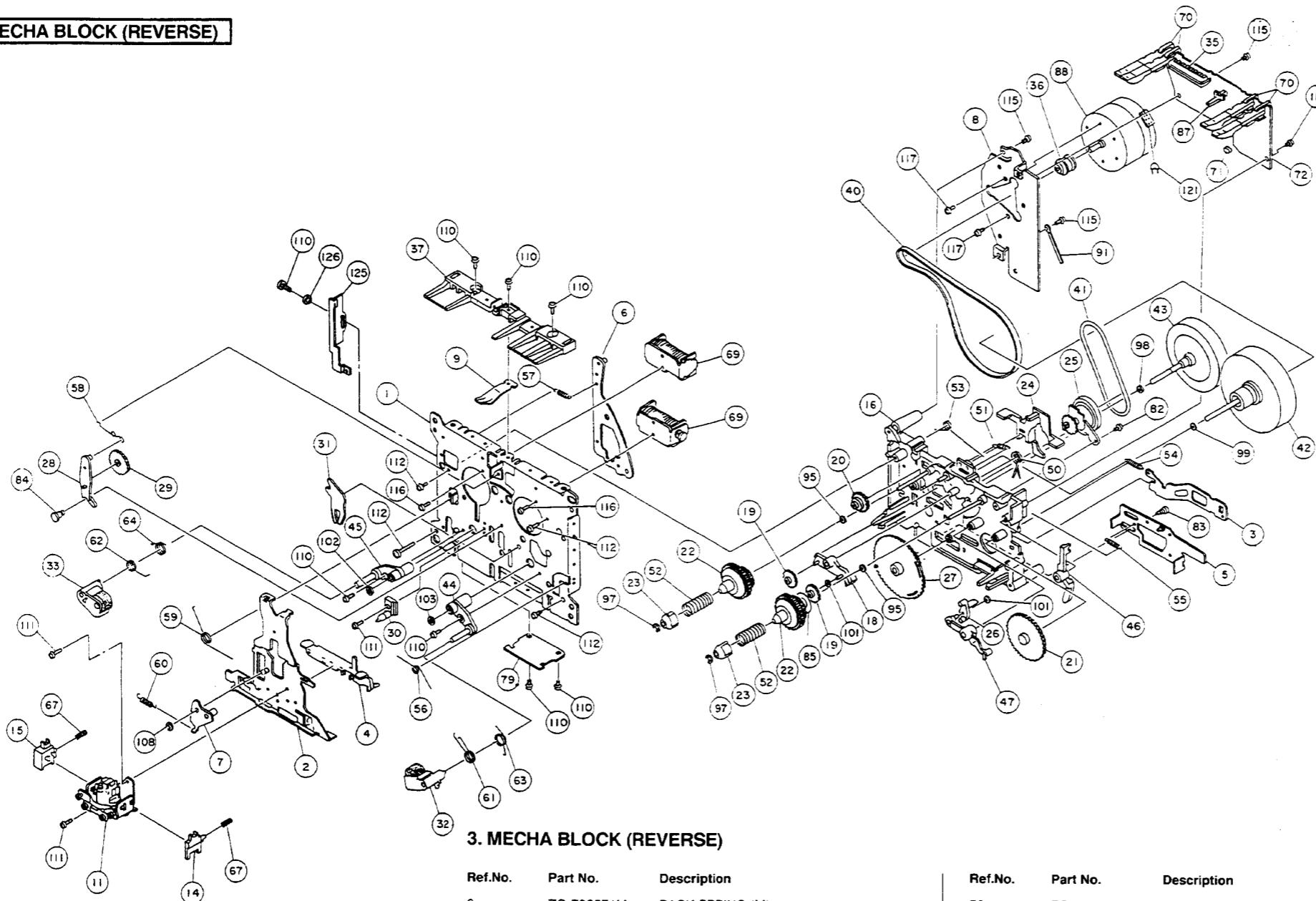
Ref.No.	Part No.	Description
7	ZG-732571M	PACK SPRING (M)
12	MS-732393M	P ROLLER SHAFT
16	MT-732394J	REEL ASSY (T)
17	ML-732395M	BRAKE ARM
18	MT-732396M	REEL (S)
19	MT-732397J	REEL CAP (B)
20	MZ-732398M	FF GEAR
22	MZ-732401J	PLAY CAM GEAR
23	MZ-732402J	CLUTCH ASSY
25	MZ-732404M	PLAY GEAR
26	HZ-732405J	HEAD BASE
30	ML-732409J	MOTOR PULLEY (C)
32	MP-732411J	PINCH ROLLER
33	MZ-732412M	FLYWHEEL GEAR
36	MB-732415M	CLUTCH BELT (C)
37	MB-732416M	DRIVE BELT
40	MI-732417M	FLYWHEEL
41	MV-732418J	HOUSING ASSY
47	ZG-732421M	REEL SPRING
51	ZG-72607J	SP HEAD (RP)

Ref.No.	Part No.	Description
52	ZG-732425M	P ROLLER SPRING
56	MZ-732426M	REFLECT SEAL
61	ET-732427M	DETECTOR NJL5165K
62	EP-732428M	SOLENOID ASSY
64	ES-732429M	SW LEAF LSA-1146-2AU
67	ES-732430M	SW LEAF LSA-1114F
69	HR-732431M	HEAD RP MS15R-AA2N4
70	HZ-732414M	DUMMY E HEAD LE100-C1
71	BM-729992J	MOTOR EG-530KD-2B
75	ZW-726629J	PSW21X040X025
77	ZW-725589J	PSW16X060X050
80	ZS-732434M	SCREW 1.7X6SPL
85	ZS-725379J	T2BID20X04

**NOTE:**

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

MECHA BLOCK (REVERSE)



3. MECHA BLOCK (REVERSE)

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
9	ZG-732571M	PACK SPRING (M)	53	ZG-732462J	SP BRAKE
11	HR-732436J	HEAD RP BLK HX-M800W	56	ZG-732463J	SP FR SHIFT
14	MS-732437J	TAPE GUIDE (R)	58	ZG-732464J	SP PLAY ARM
15	MS-732438J	TAPE GUIDE (L)	59	ZG-732465J	SP HEAD CHASSIS (B)
19	MZ-732439J	FR GEAR	61	ZG-732466J	SP P-ROLLER (RA)
20	MZ-732440J	REW GEAR	62	ZG-732467J	SP P-ROLLER (LA)
21	MZ-732441J	FR CAM GEAR	63	ZG-732468J	SP P-ROLLER ARM (RB)
22	MT-732442J	REEL ASSY (G)	64	ZG-732469J	SP P-ROLLER ARM (LB)
23	MT-732573J	REEL CAP (C)	69	EP-732470J	SOLENOID ASSY (B)
24	ML-732444J	BRAKE ARM (B)	70	ES-732429M	SW LEAF LSA-1146-2AU
25	MZ-732445J	CLUTCH (B) ASSY	71	ET-732427M	DETECTOR NJL5165K
27	MZ-732446J	PL CAM GEAR (B)	85	MZ-732471J	REFLECT SEAL
29	MZ-732447J	PLAY GEAR	88	BM-729993J	MOTOR EG-530YD-2B
30	MS-732448J	CASSETTE GUIDE	95	ZW-726629J	PSW21X040X025
32	MP-732449J	PINCH ROLLER (R) ASSY	97	ZW-715984	PW16X035X050PSL
33	MP-732450J	PINCH ROLLER (L) ASSY	101	ZW-716206	PW17X035X025PSL
36	MR-732452J	MOTOR PULLEY (F)	102	ZW-749818	WASHER 1.8X5.0X0.5NYL
40	MB-732574J	DRIVE BELT	103	ZW-749819	WASHER 2.1X7.0X0.5NYL
41	MB-732454J	CLUTCH BELT (F)	110	ZS-725379J	T2B1D20X04
42	MI-732575J	FLYWHEEL (A) ASSY	111	ZS-726632J	SCREW 20X05
43	MI-732576J	FLYWHEEL (B) ASSY			
44	MV-732457J	HOUSING (R)			
45	MV-732458J	HOUSING (L)			
50	ZG-732459J	SP FR ARM (G)			
51	ZG-732460J	SP FR ARM (B)			
52	ZG-732461J	SP REEL (F)			

NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

#### 4. P.C BOARD

Ref.No.	Part No.	Description
1	BA-C1028A020A	PC( #) MAIN BLK AX-M430(U) [U,E]
2	BA-C1028A020B	PC( #) MAIN BLK AX-M430(V) [V,B,S]
3	BA-C1028A030A	PC PRE AMP BLK AX-M430(U) [U]
4	BA-C1028A030B	PC PRE AMP BLK AX-M430(E) [E,B,S]
5	BA-C1028A030C	PC PRE AMP BLK AX-M430(V) [V]
6	BA-C1028A040A	PC( #) GEQ BLK AX-M430

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARD.

- MAIN P.C BOARD
- OPERATION P.C BOARD

PC (#) GEQ BLK CONSISTS OF FOLLOWING P.C BOARD.

- MAIN VR P.C BOARD
- POWER SW P.C BOARD

#### 5. MAIN P.C BOARD

Ref.No.	Part No.	Description
C1	EC-389414J	C CE V DE7 B102K 400AC
C2	EC-383075J	C EC V CUT SME 332M 35.0DC
C3	EC-383075J	C EC V CUT SME 332M 35.0DC
C4	EC-389414J	C CE V DE7 B102K 400AC
C18	EC-389414J	C CE V DE7 B102K 400AC
C23	EC-389414J	C CE V DE7 B102K 400AC
D1	*ED-403291J	D SILICON RS403-SC51 200/ 4.0A
D2	*ED-511907	D SILICON 1N4002 100/1.0A
D3	*ED-511907	D SILICON 1N4002 100/1.0A
D4	*ED-511907	D SILICON 1N4002 100/1.0A
D5	*ED-511907	D SILICON 1N4002 100/1.0A
D6	ED-346560	D ZENER H HZ12B3L
D7	ED-346558	D ZENER H HZ12B1L
D8	*ED-511907	D SILICON 1N4002 100/1.0A
D9	*ED-511907	D SILICON 1N4002 100/1.0A
D10	*ED-511907	D SILICON 1N4002 100/1.0A
D11	ED-346627	D ZENER H HZ33 2
D12	*ED-511907	D SILICON 1N4002 100/1.0A
D13	*ED-511907	D SILICON 1N4002 100/1.0A
D14	ED-307610	D ZENER H HZ7 A2
D15	ED-624903	D SILICON H 1S2473
D16	ED-624903	D SILICON H 1S2473
D17	ED-624903	D SILICON H 1S2473
D18	ED-624903	D SILICON H 1S2473
D19	*ED-357036	D SILICON DBA20B-K15 100/ 2.0A
D20	ED-624903	D SILICON H 1S2473
D21	ED-346560	D ZENER H HZ12B3L
D22	ED-346604	D ZENER H HZ7 B2
D23	*ED-511907	D SILICON 1N4002 100/1.0A
D24	*ED-511907	D SILICON 1N4002 100/1.0A
D25	ED-624903	D SILICON H 1S2473
FR14	*ER-200746	R FUSE H ERD2FC 1/4W 1000G
FR15	*ER-200746	R FUSE H ERD2FC 1/4W 1000G
FR24	*ER-328278	R FUSE H ERD2FC 1/4W 10R0G
FR35	*ER-328278	R FUSE H ERD2FC 1/4W 10R0G
IC1	*EI-394709J	IC STK4142-2
IC2	*EI-377101	IC UPC7805HF
J1	EJ-366675	PHONE J HLJ4318-3040 [HEADPHONE JACK]
J2	EJ-394445J	SOCKET 52303-1411 14P [TUNER JACK]
J3	EJ-394442J	SOCKET 52303-1211 12P [CD JACK]
L1	EO-337880	COIL FIX 2 202AK-018 2R2K
L2	EO-337880	COIL FIX 2 202AK-018 2R2K
L3	EO-342936	COIL BALUM [V,B,S]
L4	EO-342936	COIL BALUM [V,B,S]
R28	ER-397193J	R OMF V T05 FS 1W 100J
R29	ER-397193J	R OMF V T05 FS 1W 100J
R40	ER-397193J	R OMF V T05 FS 1W 100J
R41	ER-397193J	R OMF V T05 FS 1W 100J

Ref.No.	Part No.	Description
SW1	ES-403293J	SW PUSH SPUL19310A 2-02-02S [SURROUND SW]
TM1	EJ-394712J	TERMINAL T5980 8P [SPEAKER TERMINAL]
TR1	ET-366581	TR 2SD1762 E,F
TR2	ET-397152J	TR 2SC3382 T,U
TR3	ET-400965J	TR 2SB1357 E,F T05
TR4	ET-400965J	TR 2SB1357 E,F T05
TR5	ET-397152J	TR 2SC3382 T,U
TR6	ET-353899	TR 2SA1317 S,T,U
TR7	ET-353899	TR 2SA1317 S,T,U
TR8	ET-366581	TR 2SD1762 E,F
TR9	ET-397160J	TR 2SC3330 R,S,T,U,V
TR10	ET-373392	TR DTC124XS
TR11	ET-354371	TR DTC124ES
TR12	ET-354414	TR DTC144ES
TR13	ET-356336	TR DTA114ES
TR14	ET-373382	TR DTA143ZS
TR15	ET-401091J	TR 2SD2144S U,V,W T05
TR16	ET-401091J	TR 2SD2144S U,V,W T05
TR17	ET-354365	TR DTC114YS
F1	*EF-359086	FUSE BET T 250V 4.00A
F2	*EF-359086	FUSE BET T 250V 4.00A
F3	*EF-355374	FUSE BET T 250V 500MA
F4	*EF-355374	FUSE BET T 250V 500MA
F5	*EF-359007	FUSE BET T 250V 1.25A
F6	*EF-358641	FUSE BET T 250V 800MA
F7	*EF-358641	FUSE BET T 250V 800MA
F8	*EF-364518	FUSE BET T 250V 2.50A
F9	*EF-364518	FUSE BET T 250V 2.50A

#### 6. OPERATION P.C BOARD

Ref.No.	Part No.	Description
D101	ED-624903	D SILICON H 1S2473
D102	ED-624903	D SILICON H 1S2473
D103	ED-624903	D SILICON H 1S2473
D104	ED-624903	D SILICON H 1S2473
D105	ED-624903	D SILICON H 1S2473
D106	ED-624903	D SILICON H 1S2473
D107	ED-624903	D SILICON H 1S2473
D108	ED-624903	D SILICON H 1S2473
D109	ED-624903	D SILICON H 1S2473
D110	ED-624903	D SILICON H 1S2473
D111	ED-382365J	D LED SLR-34VC3F RED
D112	ED-394723J	D LED GL3HY44 YELLOW
D113	ED-394723J	D LED GL3HY44 YELLOW
D114	ED-382365J	D LED SLR-34VC3F RED
D115	ED-382365J	D LED SLR-34VC3F RED
D116	ED-394723J	D LED GL3HY44 YELLOW
D117	ED-394723J	D LED GL3HY44 YELLOW
D118	ED-394723J	D LED GL3HY44 YELLOW
D119	ED-394723J	D LED GL3HY44 YELLOW
IC101	EI-394569J	IC M66312P
SW101	ES-390620J	SW SLIDE SSSF 01-02N [DOLBY]
TR101	ET-373382	TR DTA143ZS
TS101	ES-394818J	SW TACT SOR-123HS T05 [REC PAUSE]
TS102	ES-394818J	SW TACT SOR-123HS T05 [REW]
TS103	ES-394818J	SW TACT SOR-123HS T05 [REV]
TS104	ES-394818J	SW TACT SOR-123HS T05 [STOP]
TS105	ES-394818J	SW TACT SOR-123HS T05 [DUBBING X1]
TS106	ES-394818J	SW TACT SOR-123HS T05 [AUTO MUTE]
TS107	ES-394818J	SW TACT SOR-123HS T05 [FF]
TS108	ES-394818J	SW TACT SOR-123HS T05 [FWD]
TS109	ES-394818J	SW TACT SOR-123HS T05 [OPERATION TAPE 1/2]
TS110	ES-394818J	SW TACT SOR-123HS T05 [DUBBING X2]

## 7. PRE AMP P.C BOARD

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
C142	*EC-338496	C CE V DE7 FZ 472P 400AC	RL1	*EQ-394450J	RELAY POW DG12D1-O(M) 12V
C143	*EC-338496	C CE V DE7 FZ 472P 400AC	T1	EO-403296J	[U] COIL OSC 1 C1028 100.0KHZ
C144	*EC-389414J	C CE V DE7 B102K 400AC [U]	TM1	*EJ-394711J	SOCKET OUT M7039-A 1P [U] [AC OUTLET]
D1	ED-364033	D ZENER H HZS6.8B3J F05	TR1	ET-352726	TR 2SA1392 T.U
D2	ED-364033	D ZENER H HZS6.8B3J F05	TR2	ET-397160J	TR 2SC3330 R,S,T,U,V
D3	ED-307572	D SILICON H 1SS131	TR3	ET-397160J	TR 2SC3330 R,S,T,U,V
D4	ED-307572	D SILICON H 1SS131	TR4	ET-397160J	TR 2SC3330 R,S,T,U,V
D5	ED-624903	D SILICON H 1S2473	TR5	ET-397160J	TR 2SC3330 R,S,T,U,V
D6	ED-307572	D SILICON H 1SS131	TR6	ET-353897	TR DTC114ES
D7	ED-367520	D ZENER H HZS5.6B3J F05	TR7	ET-354415	TR DTA144ES
D8	ED-307572	D SILICON H 1SS131	TR8	ET-354414	TR DTC144ES
D9	ED-624903	D SILICON H 1S2473	TR9	ET-356336	TR DTA114ES
D10	ED-624903	D SILICON H 1S2473	TR10	ET-354414	TR DTC144ES
D11	ED-307572	D SILICON H 1SS131	TR11	ET-397160J	TR 2SC3330 R,S,T,U,V
D12	ED-307572	D SILICON H 1SS131	TR12	ET-360399	TR DTC114TS
D13	ED-307572	D SILICON H 1SS131	TR13	ET-360399	TR DTC114TS
D14	ED-307572	D SILICON H 1SS131	TR14	ET-354364	TR DTC143TS
D15	ED-307572	D SILICON H 1SS131	TR15	ET-354364	TR DTC143TS
D16	ED-307572	D SILICON H 1SS131	TR16	ET-397160J	TR 2SC3330 R,S,T,U,V
D17	ED-307572	D SILICON H 1SS131	TR17	ET-397160J	TR 2SC3330 R,S,T,U,V
D18	ED-391003J	D ZENER H HZS4C3	TR18	ET-356336	TR DTA114ES
D19	ED-511907	D SILICON 1N4002 100/1.0A	TR19	ET-353897	TR DTC114ES
D20	ED-307572	D SILICON H 1SS131	TR20	ET-353897	TR DTC114ES
D21	ED-511907	D SILICON 1N4002 100/1.0A	TR21	ET-369248	TR DTA114YS
D22	ED-511907	D SILICON 1N4002 100/1.0A	TR22	ET-373392	TR DTC124XS
D23	ED-511907	D SILICON 1N4002 100/1.0A	TR23	ET-360399	TR DTC114TS
D24	ED-307572	D SILICON H 1SS131	TR24	ET-373392	TR DTC124XS
D25	ED-307572	D SILICON H 1SS131	TR25	ET-373392	TR DTC124XS
D26	ED-307572	D SILICON H 1SS131	TR26	ET-373392	TR DTC124XS
D27	ED-307572	D SILICON H 1SS131	TR27	ET-356336	TR DTA114ES
D28	ED-624903	D SILICON H 1S2473	TR28	ET-373392	TR DTC124XS
D29	ED-307572	D SILICON H 1SS131	TR29	ET-394570J	TR 2SA1038 S T05
D30	ED-307572	D SILICON H 1SS131	TR30	ET-366581	TR 2SD1762 E,F
D31	ED-307572	D SILICON H 1SS131	TR31	ET-397160J	TR 2SC3330 R,S,T,U,V
D32	ED-624903	D SILICON H 1S2473	TR32	ET-397160J	TR 2SC3330 R,S,T,U,V
D33	ED-624903	D SILICON H 1S2473	TR33	ET-397160J	TR 2SC3330 R,S,T,U,V
D34	ED-307572	D SILICON H 1SS131	TR34	ET-397160J	TR 2SC3330 R,S,T,U,V
D35	ED-307572	D SILICON H 1SS131	TR35	ET-354364	TR DTC143TS
D36	ED-307572	D SILICON H 1SS131 [U]	TR36	ET-354364	TR DTC143TS
D37	ED-307572	D SILICON H 1SS131 [U]	TR37	ET-354364	TR DTC143TS
D38	ED-624903	D SILICON H 1S2473	TR38	ET-354364	TR DTC143TS
D39	ED-307572	D SILICON H 1SS131	TR39	ET-354364	TR DTC143TS
FL1	EO-356809	COIL TUN 1 100Z-121 100.00KHZ	TR40	ET-354364	TR DTC143TS
FL2	EO-356809	COIL TUN 1 100Z-121 100.00KHZ	TR41	ET-394571J	TR 2SC2389 S,E T05
FL3	EO-356809	COIL TUN 1 100Z-121 100.00KHZ	TR42	ET-394571J	TR 2SC2389 S,E T05
FL4	EO-356809	COIL TUN 1 100Z-121 100.00KHZ	TR43	ET-394571J	TR 2SC2389 S,E T05
FL5	*EO-394826J	COIL LF LF-2C	TR44	ET-394571J	TR 2SC2389 S,E T05
L1	EO-403342J	COIL FIX 1 LAP02 F05 4R7K [V]	TR45	ET-397160J	TR 2SC3330 R,S,T,U,V
L2	EO-403342J	COIL FIX 1 LAP02 F05 4R7K [V]	TR46	ET-397160J	TR 2SC3330 R,S,T,U,V
L3	EO-403342J	COIL FIX 1 LAP02 F05 4R7K [V]	TR47	ET-397160J	TR 2SC3330 R,S,T,U,V
L4	EO-403342J	COIL FIX 1 LAP02 F05 4R7K [V]	TR48	ET-397160J	TR 2SC3330 R,S,T,U,V
L5	EO-354600	COIL FIX 1 LAP02 F05 101K	TR49	ET-397160J	TR 2SC3330 R,S,T,U,V
L6	EO-403304J	COIL FIX 3 E1392T822J 822J392K	TR50	ET-397160J	TR 2SC3330 R,S,T,U,V
L7	EO-403304J	COIL FIX 3 E1392T822J 822J392K	TR51	ET-397160J	TR 2SC3330 R,S,T,U,V
IC1	EI-367572	IC BA15218	TR52	ET-397160J	TR 2SC3330 R,S,T,U,V
IC2	EI-302233	IC TC4051BP	TR53	ET-354365	TR DTC114YS
IC3	EI-302233	IC TC4051BP	TR54	ET-354365	TR DTC114YS
IC4	EI-367572	IC BA15218	TR55	ET-373391	TR DTC143ZS
IC5	EI-200573	IC TC4053BP	TR56	ET-397160J	TR 2SC3330 R,S,T,U,V
IC6	EI-390594J	IC PD0052	TR57	ET-397160J	TR 2SC3330 R,S,T,U,V
IC7	EI-401056J	IC PD0029	TR58	ET-397160J	TR 2SC3330 R,S,T,U,V
IC8	EI-394518J	IC UPD6376CX	TR59	ET-360399	TR DTC114TS
IC9	EI-393325J	IC M5218AP	TR60	ET-400741J	TR 2SC3708 T T05
IC10	EI-394572J	IC CXA1115BP	TR61	ET-400741J	TR 2SC3708 T T05
IC11	EI-394574J	IC LA2000	TR62	ET-354414	TR DTC144ES
IC12	EI-389322J	IC CXA1101P	TR63	ET-397160J	TR 2SC3330 R,S,T,U,V
IC13	EI-367572	IC BA15218	TR64	ET-353899	TR 2SA1317 S,T,U
IC14	EI-403294J	IC UPD75112CW FX2DKA1-119	TR65	ET-356336	TR DTA114ES
J1	EJ-394459J	SOCKET OPTICAL GP1F32R [CD OPTICAL IN]	TR66	ET-356336	TR DTA114ES
J2	EJ-403295J	PIN J *C1028 W/SHIELD 6P [PHONO/AUX JACK]	TR67	ET-396072J	TR 2SD2159 V,W
			TR68	ET-396072J	TR 2SD2159 V,W
			TR69	ET-396072J	TR 2SD2159 V,W
			TR70	ET-396072J	TR 2SD2159 V,W
			TR71	ET-397160J	TR 2SC3330 R,S,T,U,V
			TR72	ET-353899	TR 2SA1317 S,T,U
			TR73	ET-397160J	TR 2SC3330 R,S,T,U,V
			TR74	ET-397160J	TR 2SC3330 R,S,T,U,V
			TR75	ET-354414	TR DTC144ES

## PARTS LIST

Ref.No.	Part No.	Description
TR76	ET-354414	TR DTC144ES
TR77	ET-354414	TR DTC144ES [U]
TR78	ET-397160J	TR 2SC3330 R,S,T,U,V [U]
TR79	ET-373392	TR DTC124XS
TR80	ET-356336	TR DTA114ES
TR81	ET-354364	TR DTC143TS
TR82	ET-354364	TR DTC143TS
TR83	ET-354364	TR DTC143TS
TR84	ET-353897	TR DTC114ES
TR85	ET-353897	TR DTC114ES
TR86	ET-360399	TR DTC114TS
TR87	ET-353897	TR DTC114ES
VR1	EV-394561J	R S-FIX H V8K4-11(1S) 0.10W102
VR2	EV-355380	R S-FIX H V8K4-11(1S) 0.10W202
VR3	EV-367524	R S-FIX H V8K4-11(1S) 0.10W501
VR4	EV-394561J	R S-FIX H V8K4-11(1S) 0.10W102
X1	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ
F101	*EF-359007	FUSE BET T 250V 1.25A [U]
F102	*EF-359007	FUSE BET T 250V 1.25A [U]

## 8. GEQ P.C BOARD

Ref.No.	Part No.	Description
D1	ED-394416J	D LED SLV-31VT3F RED
D2	ED-394416J	D LED SLV-31VT3F RED
D3	ED-394416J	D LED SLV-31VT3F RED
D4	ED-394416J	D LED SLV-31VT3F RED
D5	ED-405359J	D LED SEL2915A C,D ORANGE
D6	ED-405359J	D LED SEL2915A C,D ORANGE
D7	ED-405359J	D LED SEL2915A C,D ORANGE
D8	ED-405359J	D LED SEL2915A C,D ORANGE
D9	ED-405359J	D LED SEL2915A C,D ORANGE
D10	ED-405359J	D LED SEL2915A C,D ORANGE
D11	ED-307572	D SILICON H 1SS131
D12	ED-307572	D SILICON H 1SS131
D13	ED-307572	D SILICON H 1SS131
D14	ED-405359J	D LED SEL2915A C,D ORANGE
IC1	EI-359053	IC LA3600
IC2	EI-359053	IC LA3600
TR1	ET-354414	TR DTC144ES
TR2	ET-356336	TR DTA114ES
TR3	ET-397160J	TR 2SC3330 R,S,T,U,V
TR4	ET-397160J	TR 2SC3330 R,S,T,U,V
TR5	ET-373382	TR DTA143ZS
TR6	ET-373382	TR DTA143ZS
TR7	ET-373382	TR DTA143ZS
TR8	ET-373382	TR DTA143ZS
TR9	ET-373382	TR DTA143ZS
TR10	ET-373382	TR DTA143ZS
TR11	ET-373382	TR DTA143ZS
TR12	ET-373382	TR DTA143ZS
TS1	ES-394736J	SW TACT SOA-133HS [INPUT SELECTOR UP]
TS2	ES-394736J	SW TACT SOA-133HS [INPUT SELECTOR DOWN]
VR1	EV-403298J	VR SLIDE RS15H113D B104
VR2	EV-403298J	VR SLIDE RS15H113D B104
VR3	EV-403298J	VR SLIDE RS15H113D B104
VR4	EV-403298J	VR SLIDE RS15H113D B104
VR5	EV-403298J	VR SLIDE RS15H113D B104
VR6	EV-403298J	VR SLIDE RS15H113D B104
VR7	EV-403298J	VR SLIDE RS15H113D B104
VR8	EV-403298J	VR SLIDE RS15H113D B104
VR9	EV-403298J	VR SLIDE RS15H113D B104
VR10	EV-403298J	VR SLIDE RS15H113D B104
VR11	EV-403297J	VR ROTARY RK11K1130 SP104 [BALANCE VR]

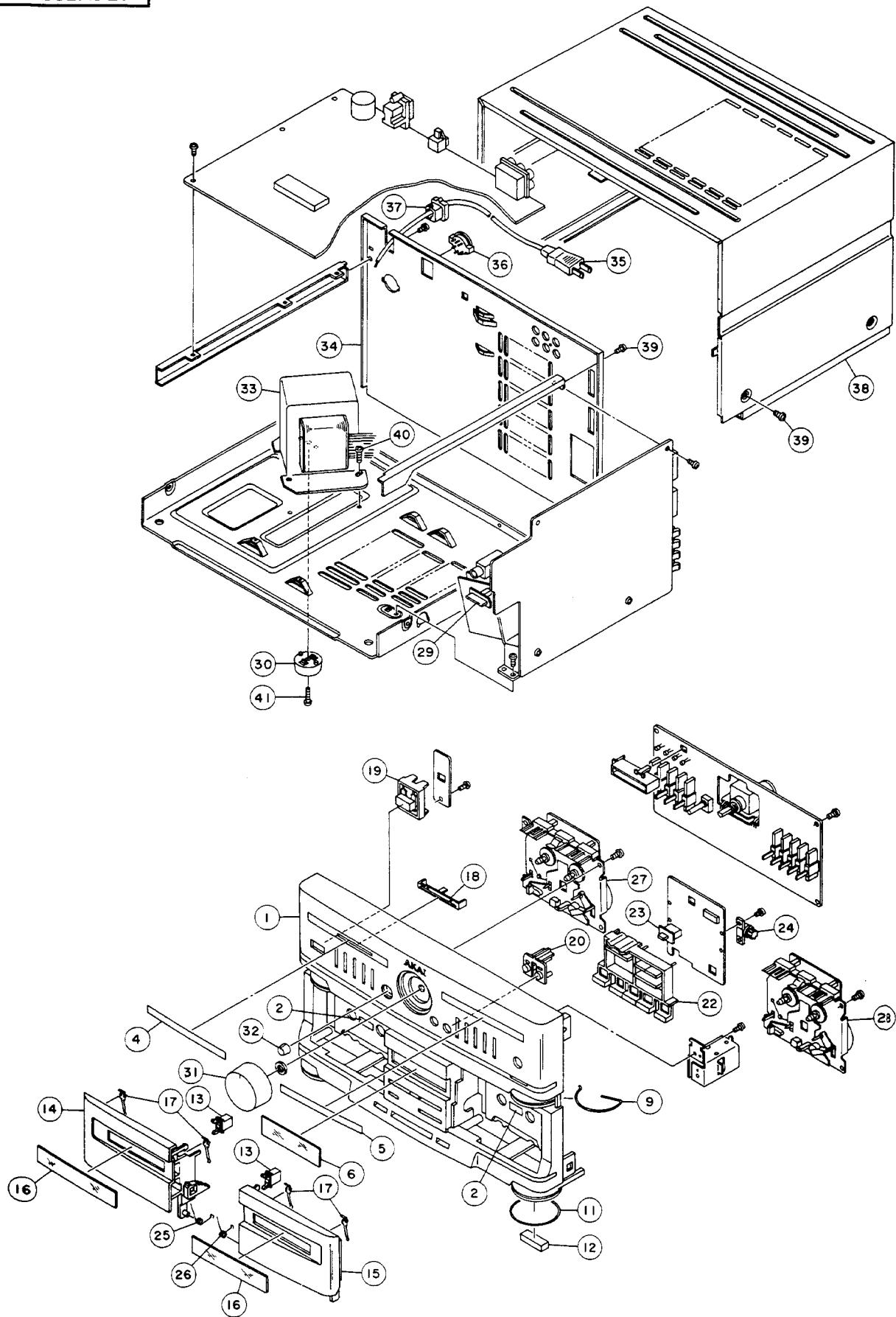
## 9. MAIN VR P.C BOARD

Ref.No.	Part No.	Description
TR51	ET-353899	TR 2SA1317 S,T,U
TR52	ET-353899	TR 2SA1317 S,T,U
TR53	ET-397160J	TR 2SC3330 R,S,T,U,V
TR54	ET-397160J	TR 2SC3330 R,S,T,U,V
VR51	EV-403299J	VR SPL *C1028 B104X2 [MAIN VR]

## 10. POWER SW P.C BOARD

Ref.No.	Part No.	Description
TS3	ES-394736J	SW TACT SOA-133HS [POWER SW]

---

**FINAL ASSEMBLY**

---

**PARTS LIST**

## ABBREVIATIONS (AMPLIFIER)

### 11. FINAL ASSEMBLY

Ref.No.	Part No.	Description
1	SP-402680M	PANEL FRONT
2	SE-394092M	REFLECTOR
4	SE-402675M	WINDOW(L)
5	SE-402676M	WINDOW(R)
6	SE-402673M	PLATE ORNAMENT-AX
9	SZ-402677M	RING FOOT AX
11	SZ-401762M	RING FOOT
12	SA-394136M	CUSHION FOOT
13	SZ-401094J	PUSH CATCH 3Y18
14	SC-402679M	LID PANEL(L)-X
15	SC-402678M	LID PANEL(R)-X
16	SE-401847M	PLATE WINDOW
17	ZG-406105M	SP PLATE CASSETTE HOLDER(2)
18	SE-394119M	LENS OPTICAL
19	SK-401821M	BUTTON POWER
20	SK-402672M	BUTTON SELECT
22	SK-401862M	BUTTON OPERATION
23	SK-394084M	KNOB SLIDE
24	MZ-380875J	DAMPER 1G88-L
25	ZG-401852M	SP TORSION EJECT(L)
26	ZG-401853M	SP TORSION EJECT(R)
27	BB-401096M	MECHA GAK-5PB-2 [TAPE-1]
28	BB-403466M	MECHA GAK3603D [TAPE-2]
29	SK-402670M	BUTTON SURROUND
30	SA-394127M1	FOOT REAR
31	SK-401829M	KNOB VR
32	SK-402674M	KNOB BALANCE
33A	*BT-403286M	TRANS POW C1028-U [U]
33B	*BT-403287M	TRANS POW C1028-EV [E.V]
33C	*BT-403288M	TRANS POW C1028-BS [B.S]
34A	SP-402666M	PANEL REAR AX-M430(U)
34B	SP-402667M	PANEL REAR AX-M430(E)
34C	SP-402669M	PANEL REAR AX-M430(V)
34D	SP-402668M	PANEL REAR AX-M430(B.S)
35A	*EW-374894	AC CORD 2C VM-0129A.VFF U/T [U]
35B	*EW-347897	AC CORD 2 CORES VM0364,LCFL EV [E.V]
35C	*EW-346249	AC CORD 2 CORES LCFL2X0.75 B [B]
35D	*EW-347898	AC CORD 2 CORES VM-0436,LCFL S [S]
36	*ES-349070	SW SELECTOR YKS11-0002 02-4 [U]
37	*EZ-371605	BUSH CORD 2271
38	SC-390588M	COVER UPPER
39	ZS-308846	T2BR30X08STL BZN PROJECTION
40	ZS-346742	ST BID40X08STL CMT CUP
41	ZS-447805	T2BR30X12STL CMT

#### NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

### 12. ACCESSORY

Ref.No.	Part No.	Description
1	AX-401055M	REMOCON RC-S630

ABBREVIATION	EXPLANATION
A	Analog
AC	Alternating Current
AMP	AMPlifier
CD	Compact Disc
COM	COMMON
D	Digital
D/A	Digital to Analog
DAC	Digital to Analog Converter
DAT	Digital Audio Tape recorder
DC	Direct Current
GND	GrouND
L	Left
LED	Light Emitting Diode
MC	Moving Coil
MM	Moving Magnet
PCB	Printed Circuit Board
R	Right
REG	REGulator
REC	RECORD
TR	TRAnsistor
SW	SWitch
V.AMP	Voltage AMPlifier
V.DISC	Video DISC
VR	Variable Resistance
VTR	Video Tape Recorder

## ABBREVIATIONS (CASSETTE)

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
AC	Alternating Current	MIN	MINute
A/D	Analog/Digital	MML	Maximum Modulation Level
AF	Auto Fader	MOL	Maximum Output Level
AMP	AMPlifier	MPX	Multi PleX
AR	Anti Recording	NC	Not Connected (No Connection)
AT BIAS	Auto Turning BIAS	NFB	Negative Feed Back
ATT	ATTenuator	NORM	NORMal
BAL	BALance	NR	Noise Reduction
BEF	Band Elimination Filter	OSC	OSCillator (OSCillation)
BSS	Blank Search System	P	Pulse
CAP M	CAPstan Motor	PB	Play Back
CH	CHannel	QMSS	Quick Memory Search System
COMP	COMParator	QR	Quick Reverse
CONT	CONTinuance	R CH	Right CHannel
CRLP	Computer Recording Level Processing	REC	REcord (RECORDing)
CS	Chip Select	REV	REVerse
D/A	Digital/Analog	ROT	ROTation
DC	Direct Current	REW	REWind
DET	DETector	SEC	SECond
DISCRI	DISCRIminator	SELE	SELEctor
DUB	DUBbing	SENS	SENSitivity
EQ	EQualizer	SEPP	Single Ended Push Pull
FF (or F.FWD)	Fast Foward	SIG	SIGnal
FLD	FLuorescent Display	SPECT	SPECTrum
FREQ	FREQuency	STD	STandard
FWD	ForWarD	SW	SWitch
GND	GrouND	SYSCON	SYstem CONtrol
H	High	TP	Test Point
HPF	High Pass Filter	TRIG	TRIGa
IND	INDicator	VCA	Voltage Control Attenuator
IPLS	Instant Program Location System	VOL	VOLUME
L	Low	VOLT	VOLTage
L CH	Left CHannel	VR	Variable Resistor
LED	Light Emitining Diode	XTAL	cysTAL
MEMO	MEMORY	X1	Normal speed
MICOM	MicroCOMputer	X2	Dubble speed

**AKAI ELECTRIC CO., LTD.**

12-14, 2-Chome, Higashi-Kojoya, Ohta-ku, Tokyo, Japan

SERVICE DEPARTMENT TEL:Tokyo (3745)9884 TELEX:J26261

Printed No. 910326-A1-3566

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# AKAI

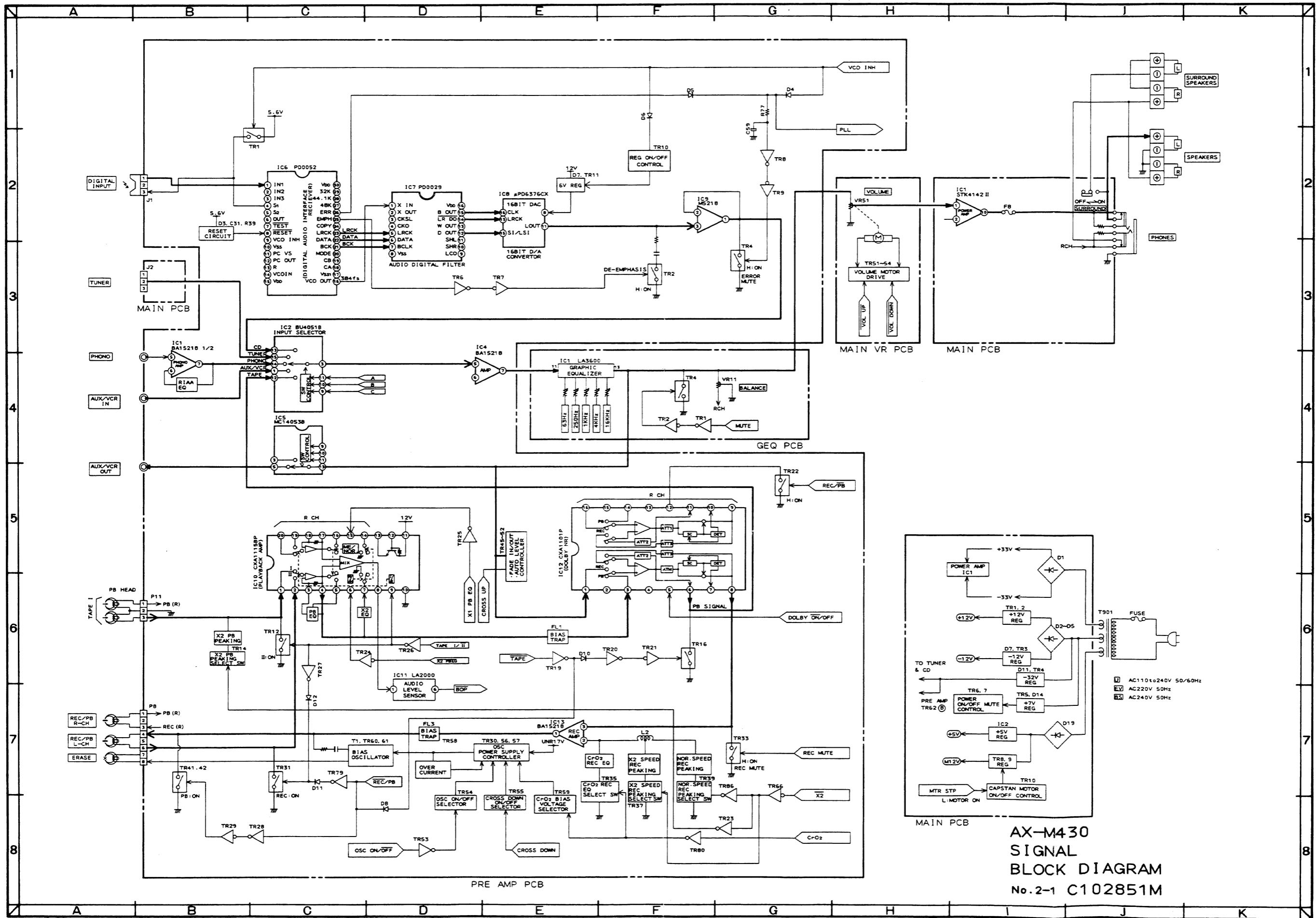
## MODEL AX-M430

### SCHEMATIC DIAGRAMS AND PC BOARDS

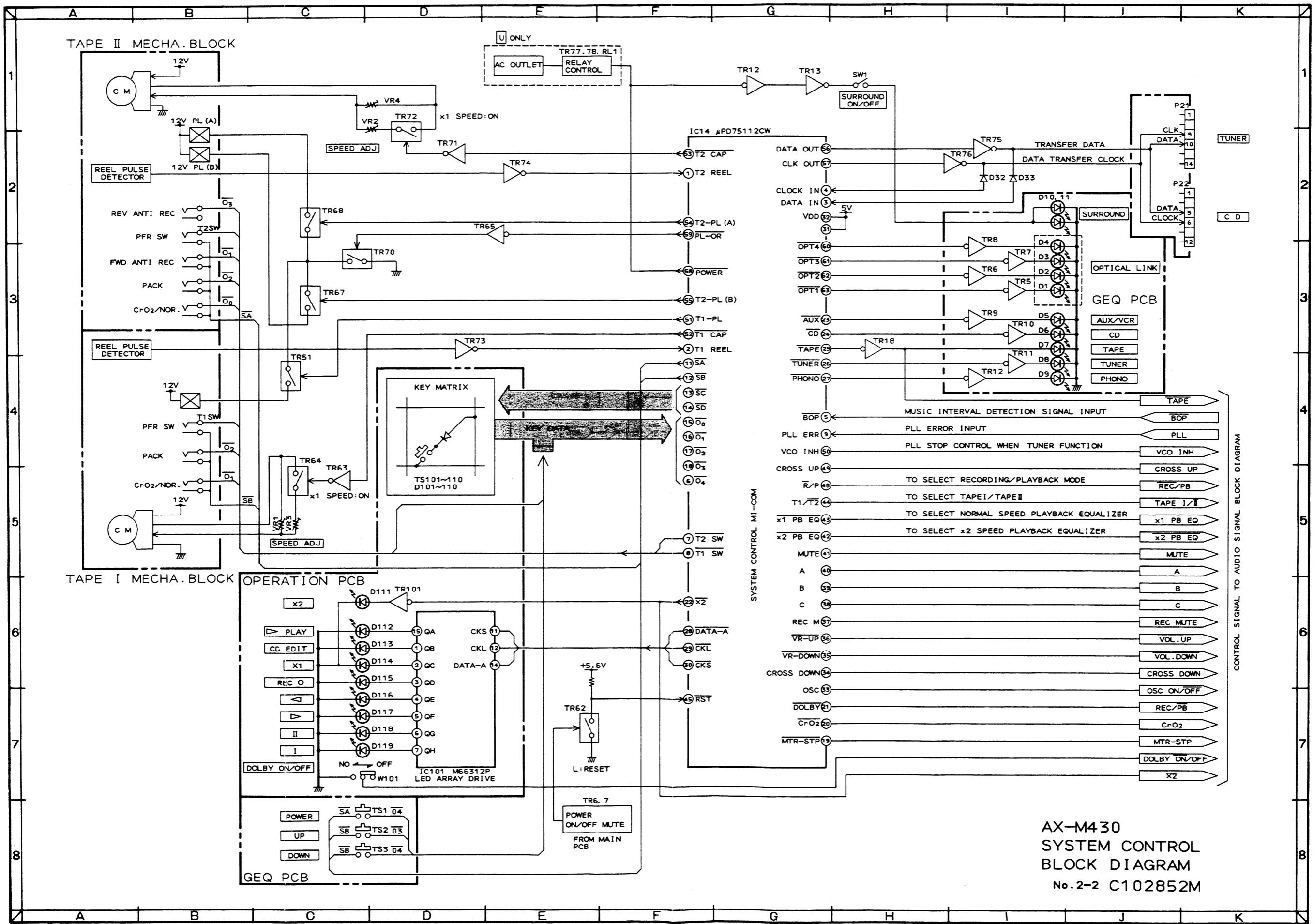
#### TABLE OF CONTENTS

I. BLOCK DIAGRAMS	
1. SIGNAL	3
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II. SCHEMATIC DIAGRAMS AND PC BOARDS	
1. CONNECTION DIAGRAM	5
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3. PRE AMP & OPERATION	8
4. GEQ	10
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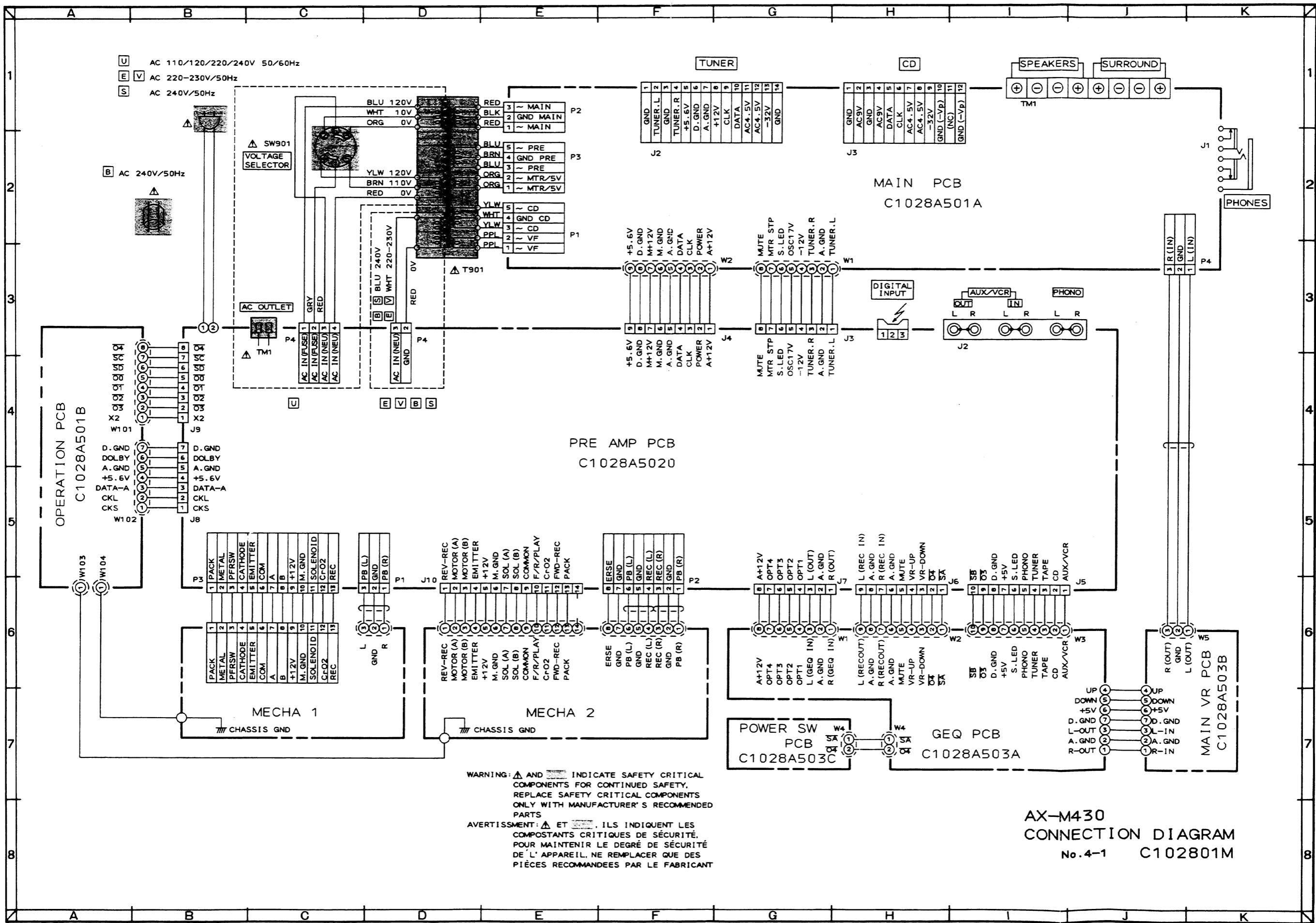
Use the following schematic diagrams and PC boards together with the provided service manual.

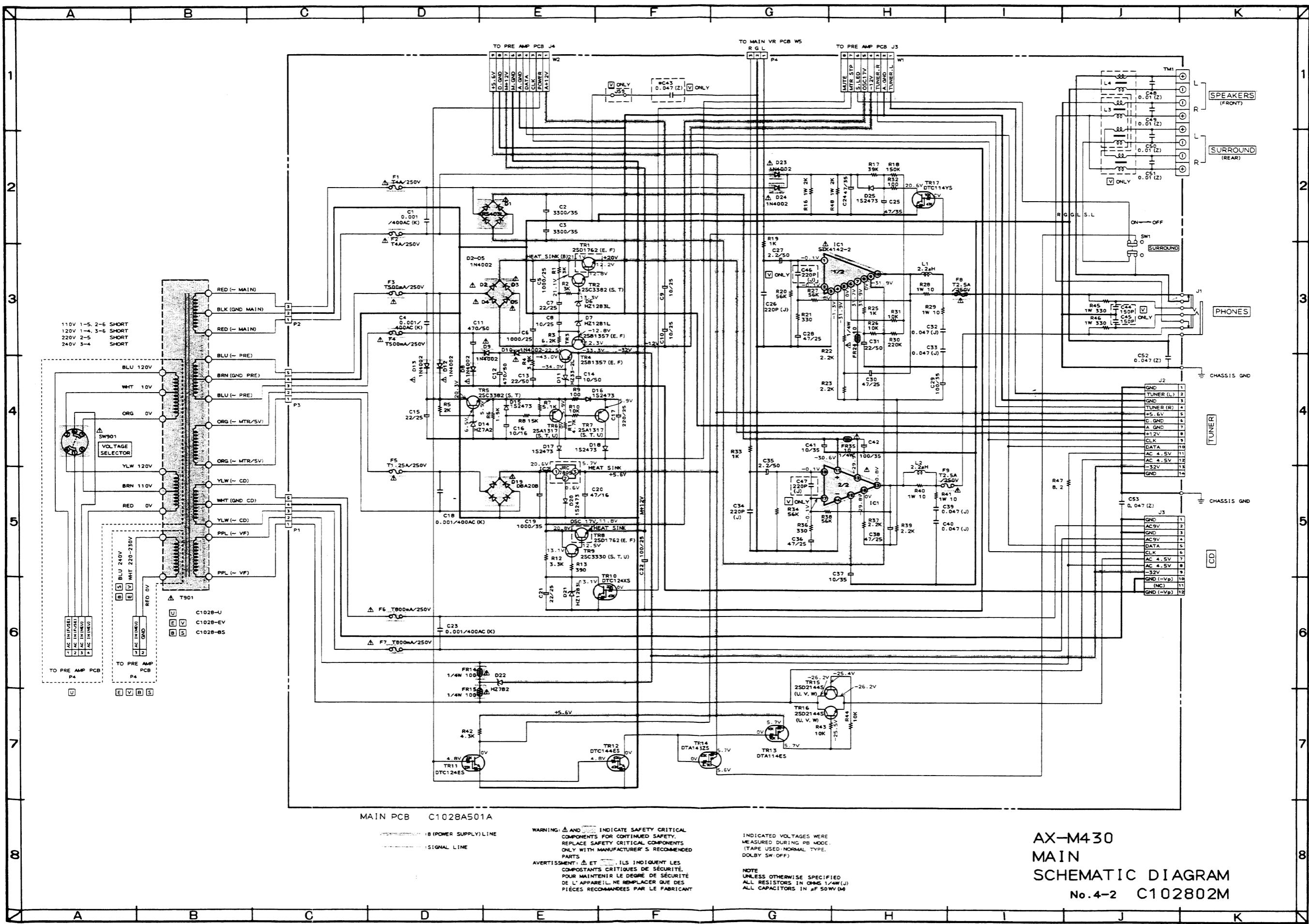


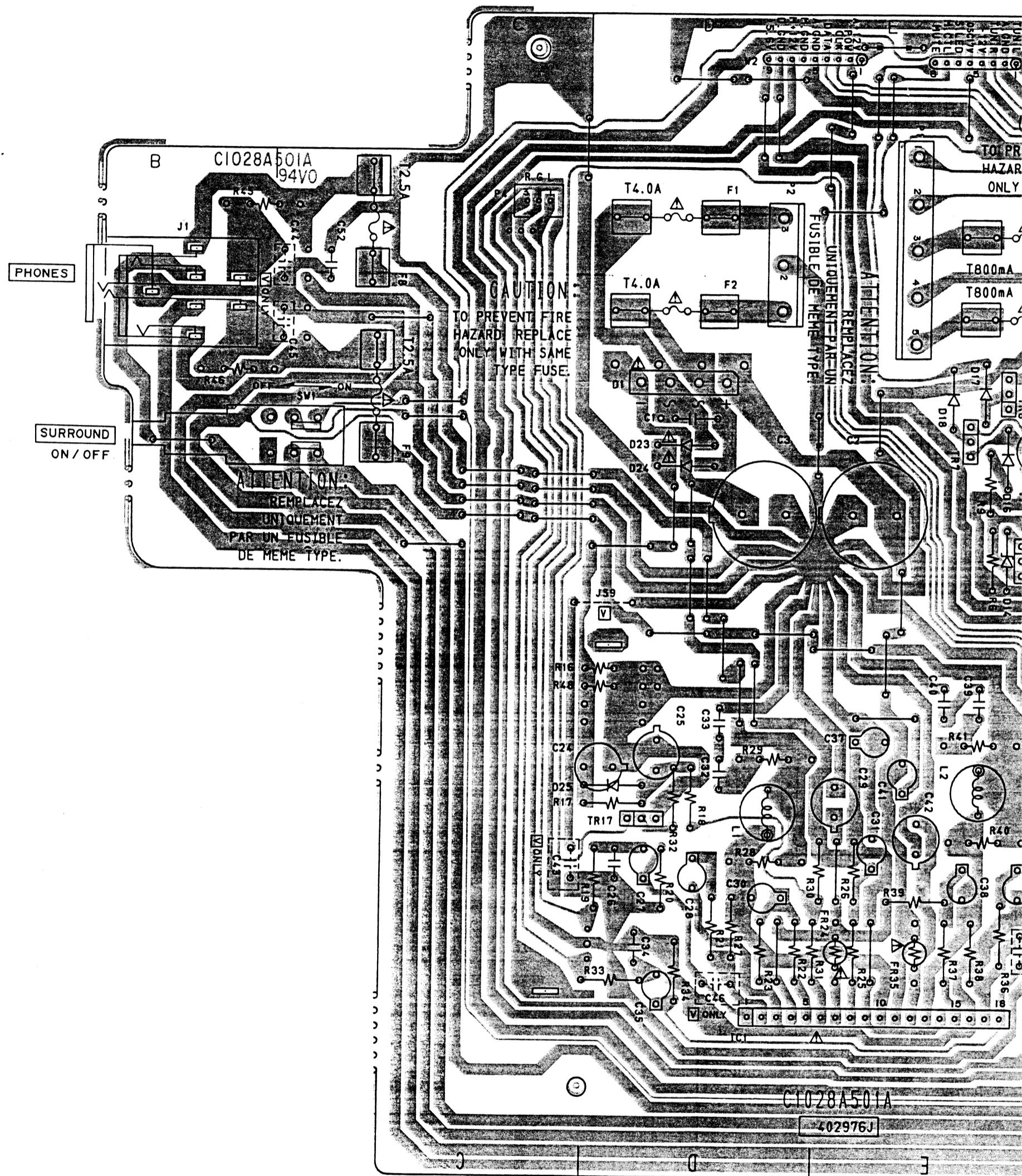
AX-M430  
SIGNAL  
BLOCK DIAGRAM  
No. 2-1 C102851M



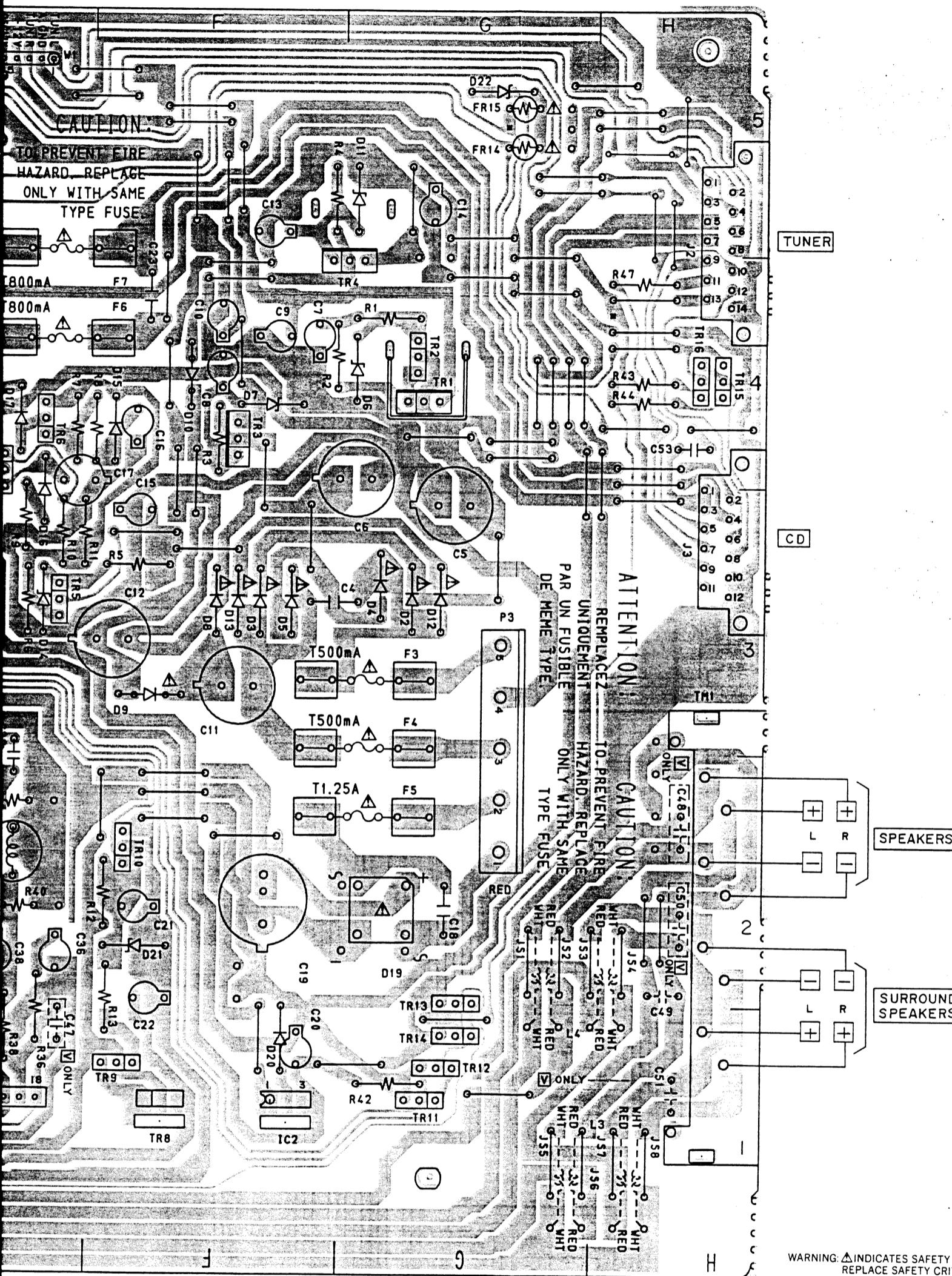
AX-M430  
SYSTEM CONTROL  
BLOCK DIAGRAM  
No.2-2 C102852M







MAIN PCB



#### PRINCIPAL PARTS LOCATION

ICs  
 IC1 ..... E1  
 IC2 ..... F1

#### CONNECTORS

J1 ..... B4  
 J2 ..... H4,5  
 J3 ..... H3  
 P1 ..... E4,5  
 P2 ..... D4  
 P3 ..... G2,3  
 P4 ..... C5  
 W1 ..... E5  
 W2 ..... D5

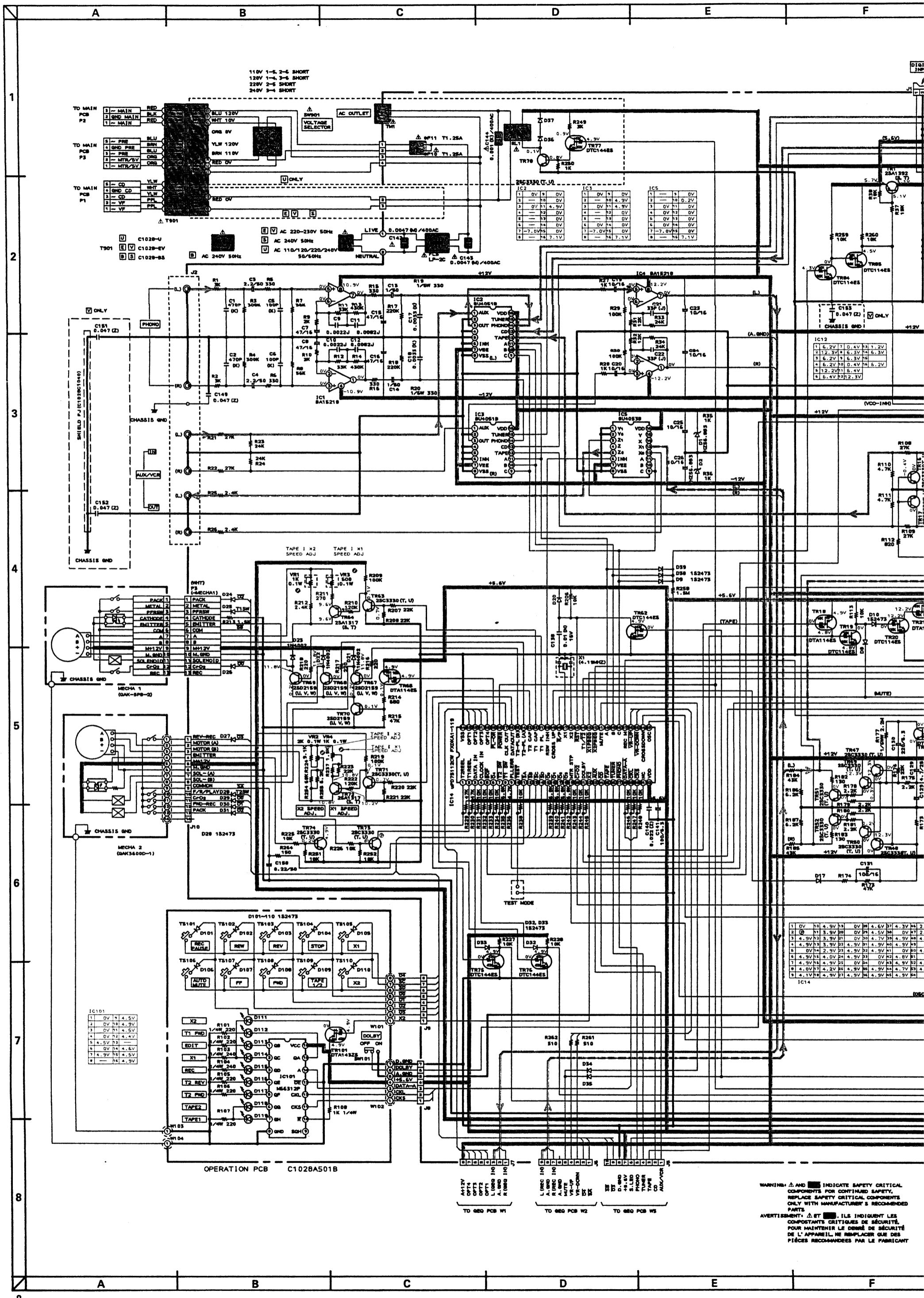
#### TRANSISTORS

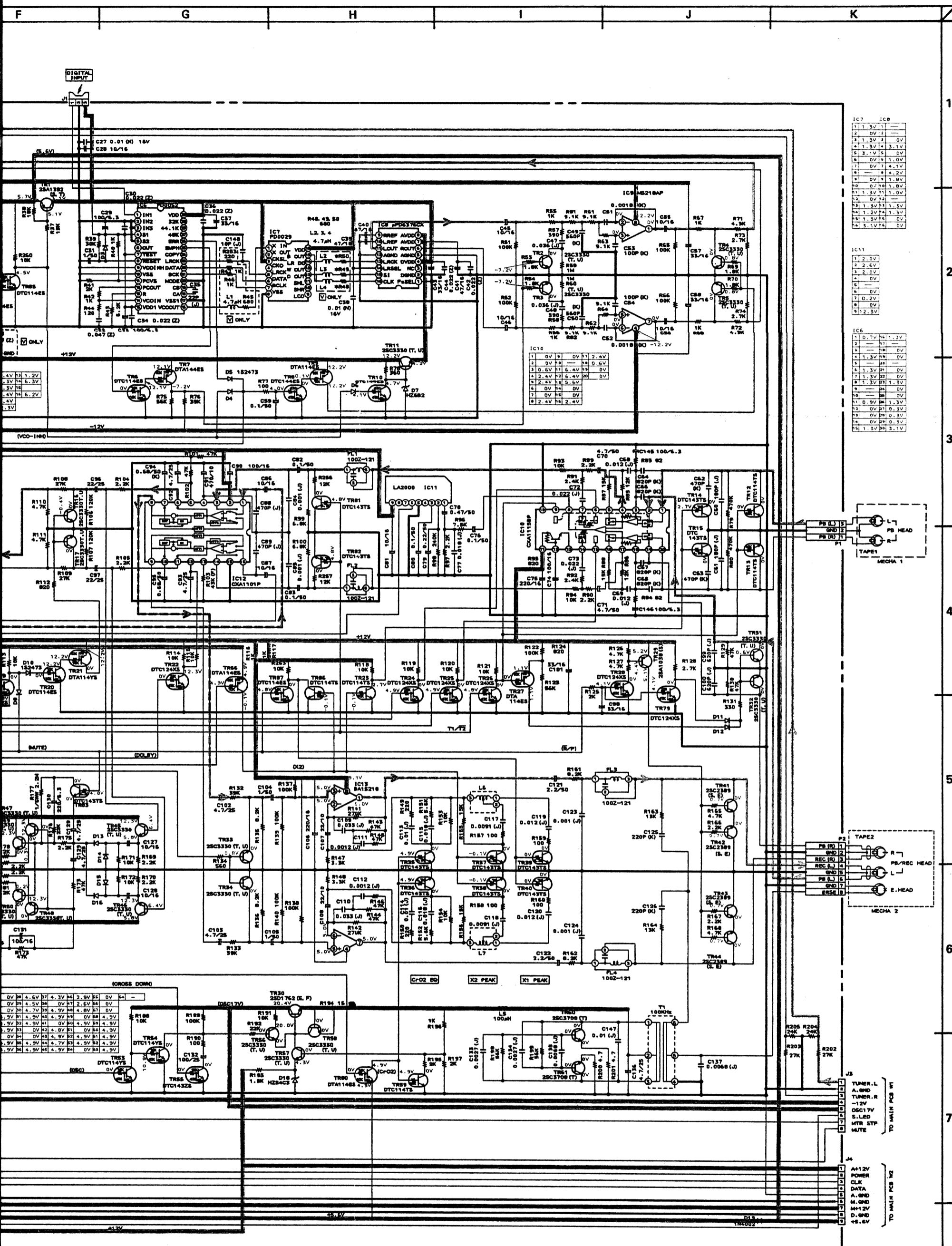
TR1 ..... G4  
 TR2 ..... G4  
 TR3 ..... F4  
 TR4 ..... G4  
 TR5 ..... E3  
 TR6 ..... E4  
 TR7 ..... E4  
 TR8 ..... F1  
 TR9 ..... F1  
 TR10 ..... F2  
 TR11 ..... G1  
 TR12 ..... G1  
 TR13 ..... G2  
 TR14 ..... G1  
 TR15 ..... H4  
 TR16 ..... H4  
 TR17 ..... D2

WARNING:  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.  
 REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S  
 RECOMMENDED PARTS

AVERTISSEMENT:  $\Delta$  IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.  
 POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,  
 NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

PCB C1028A501A





SAFETY CRITICAL  
CONTINUED SAFETY,  
CRITICAL COMPONENTS  
PURCHASER'S RECOMMENDATION

NOTE  
UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS IN OHMS 1/MW (J)  
ALL CAPACITORS IN  $\mu$ F 50VW (D)  
ALL DIODES ARE 1N5131

INDICATED VOLTAGES WERE  
MEASURED DURING "B" MODE.  
(TAPE USED: NORMAL TYPE.  
DOLBY SW: OFF)

INDICATED VOLTAGES WERE  
MEASURED DURING "B" MODE  
(TAPE USED: NORMAL TYPE,  
DOLBY SW: OFF)

AX-M430  
PRE AMP & OPERATION  
SCHEMATIC DIAGRAM  
No. 1-3 C102803M

PRINCIPAL PARTS LOCATION

ICs

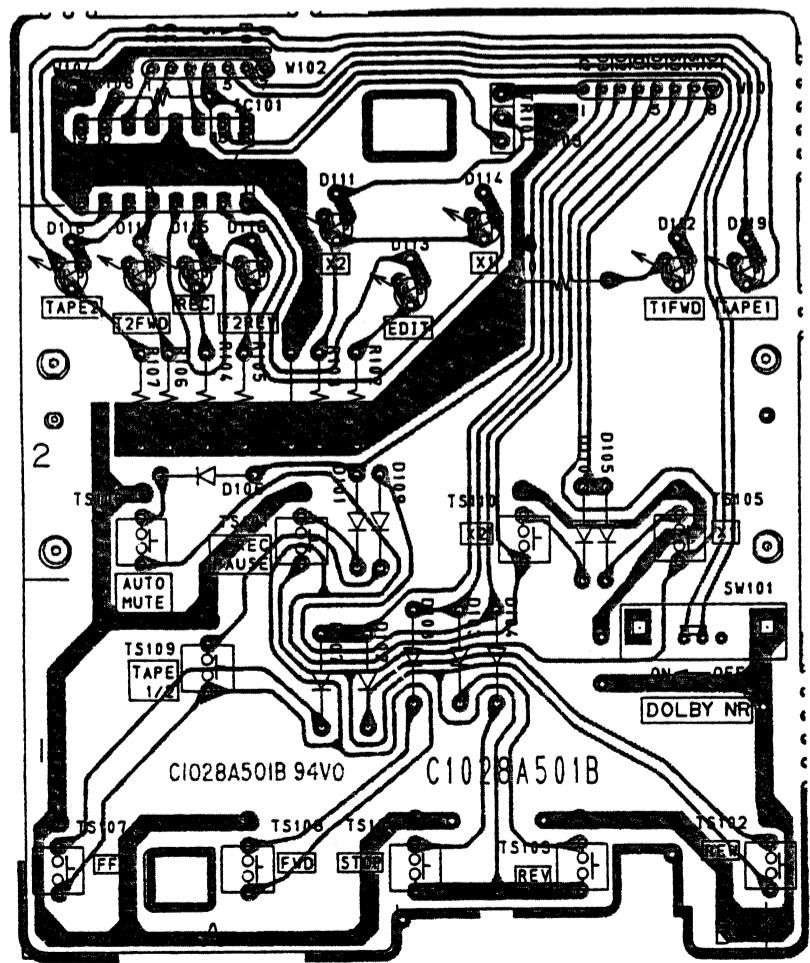
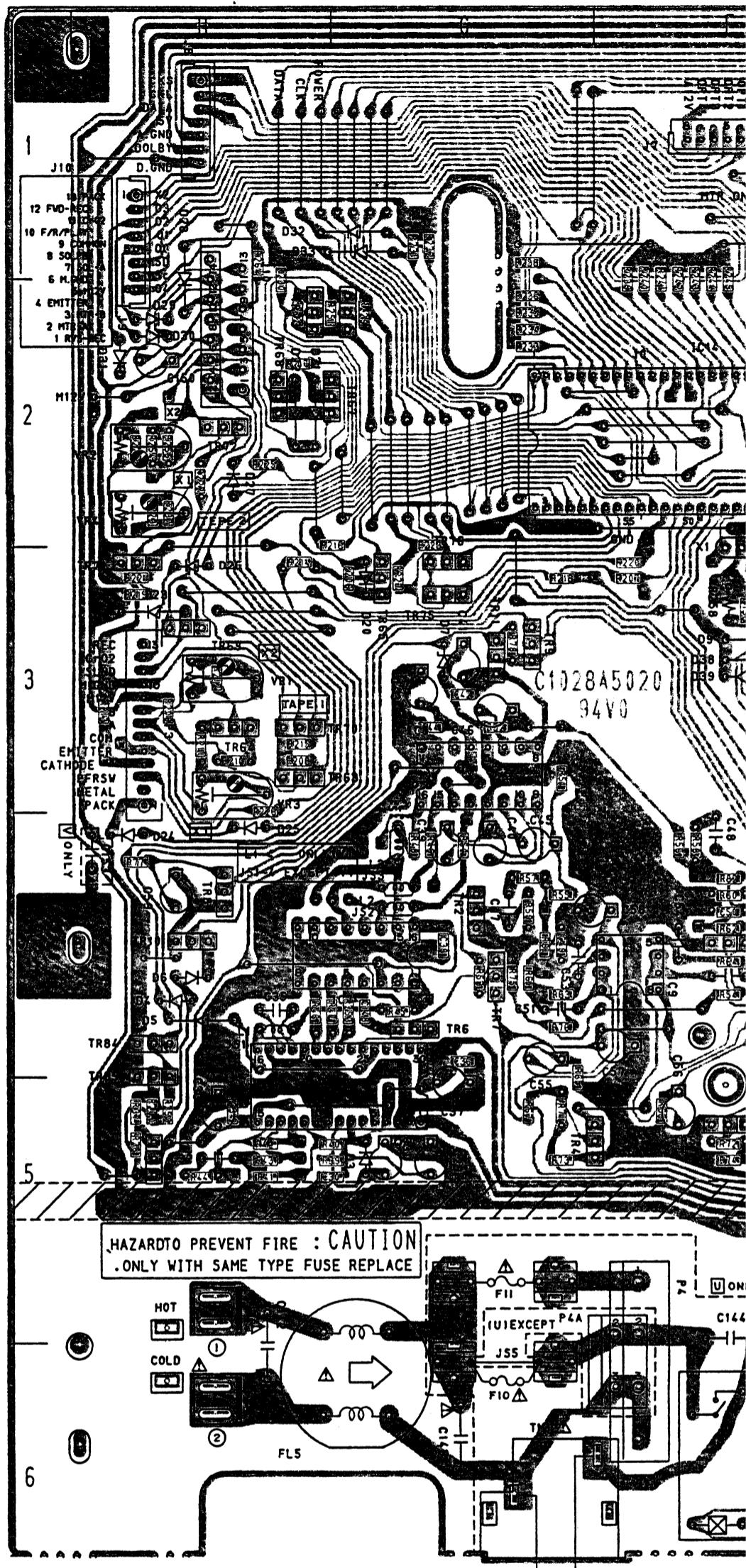
IC1	B5	TR28	C2
IC2	D6	TR29	C2
IC3	D5,6	TR30	B2
IC4	E5	TR31	E3
IC5	C,D5	TR32	E3,4
IC6	G,H5	TR33	B2,3
IC7	G4	TR34	B3
IC8	G3	TR35	D3
IC9	F4	TR36	D3
IC10	D4	TR37	C3
IC11	C4	TR38	C3
IC12	B4	TR39	C3
IC13	D3	TR40	C3
IC14	F2	TR41	E3

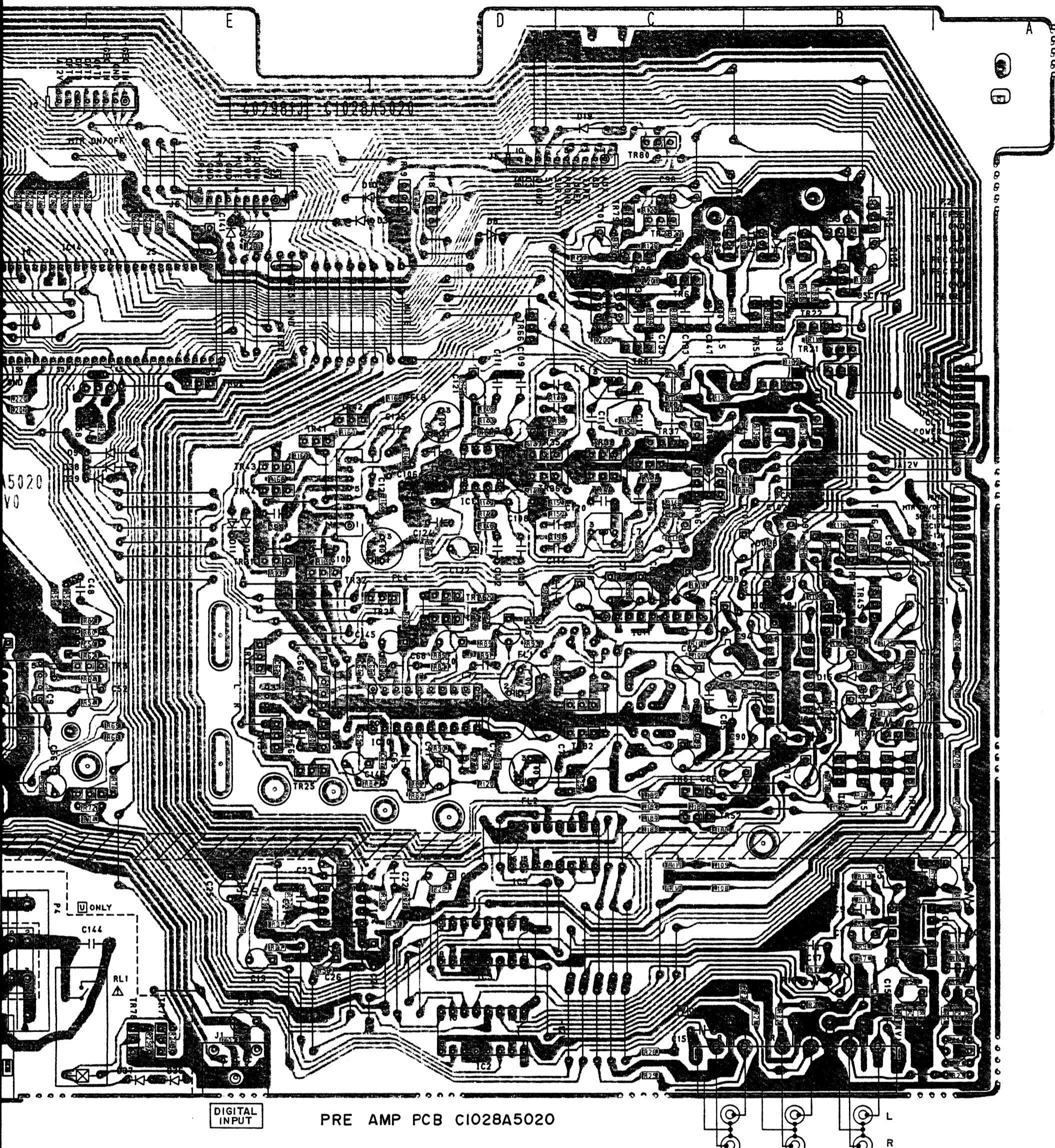
CONNECTORS

J1	E6
J2	B6
J3	A3
J4	A3
J5	C,D1
J6	E1,2
J7	F1
J8	H1
J9	H1
J10	H2
P1	E4
P2	E3
P3	H3
P4	F5,6
P4A	F6

TRANSISTORS

TR1	H5
TR2	G4
TR3	F4
TR4	F,G5
TR5	F5
TR6	G4
TR7	G4
TR8	H4
TR9	G3
TR10	H4
TR11	G3
TR12	E4
TR13	E4
TR14	E4
TR15	E4
TR16	B3
TR17	B3
TR18	D2
TR19	D1,2
TR20	B2
TR21	B2
TR22	B2
TR23	C3
TR24	D4
TR25	E5
TR26	D4
TR27	D4
TR28	C2
TR29	C2
TR30	B2
TR31	E3
TR32	E3,4
TR33	B2,3
TR34	B3
TR35	D3
TR36	D3
TR37	C3
TR38	C3
TR39	C3
TR40	C3
TR41	E3
TR42	E3
TR43	E3
TR44	E3
TR45	B4
TR46	B4
TR47	B5
TR48	B5
TR49	B5
TR50	B5
TR51	C5
TR52	C5
TR53	B2
TR54	B2
TR55	B2
TR56	B2
TR57	B2
TR58	B2
TR59	C2
TR60	C2
TR61	C2
TR62	E2
TR63	H3
TR64	H3
TR65	G3
TR66	D2
TR67	H,G2
TR68	H2
TR69	H3
TR70	H3
TR71	H3
TR72	H2
TR73	H2
TR74	G2
TR75	G3
TR76	G3
TR77	F6
TR78	F6
TR79	C2
TR80	C1
TR81	C4
TR82	C4
TR83	B4
TR84	H4
TR85	H4
TR86	C3
TR87	C3





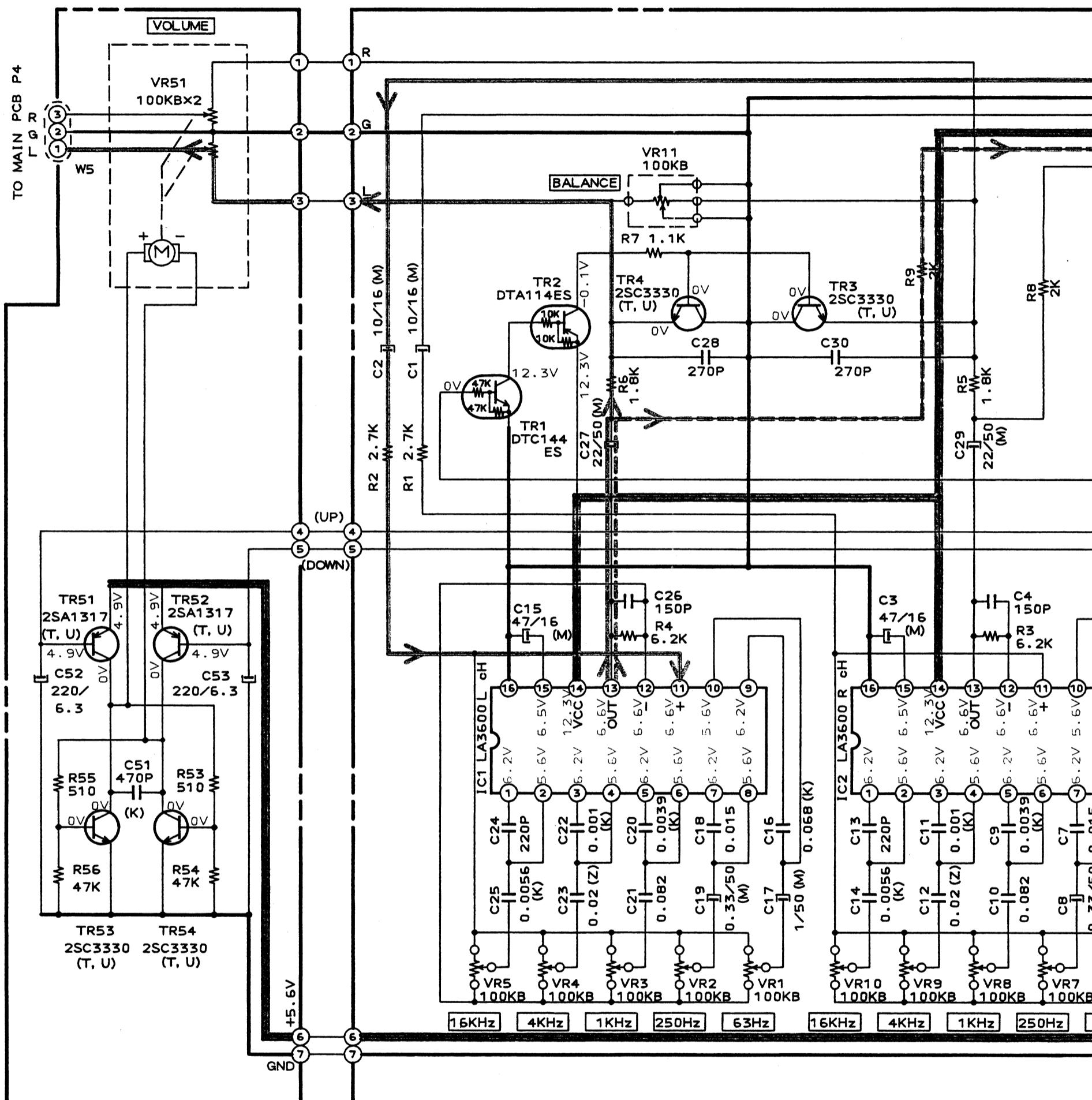
WARNING:  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.  
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S  
RECOMMENDED PARTS

AVERTISSEMENT:  $\Delta$  IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.  
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL.  
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

[DIGITAL INPUT]

[AUX / VCR]

[PHONO]



MAIN VR PCB  
C1028A503B

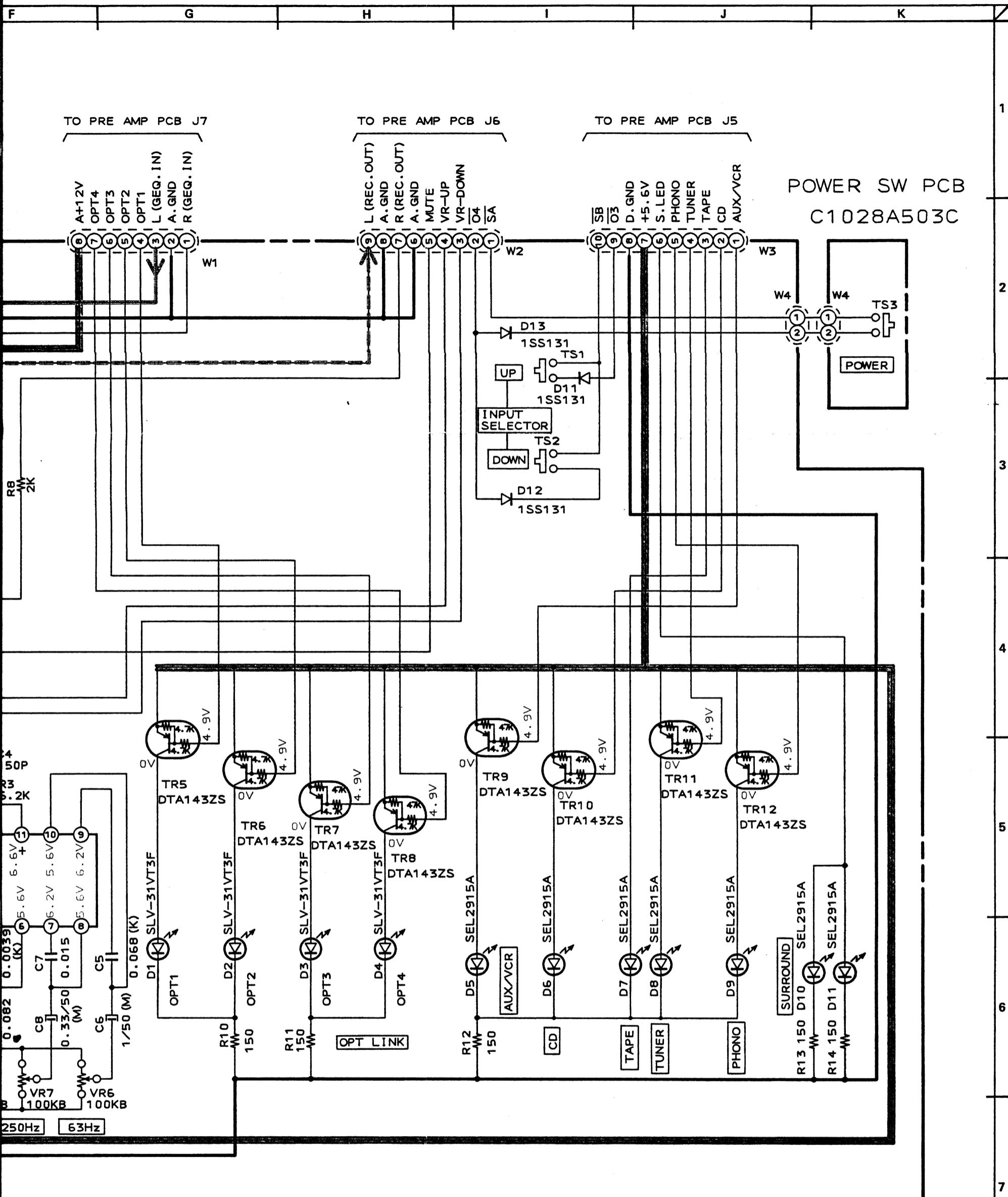
GEQ PCB C1028A503A

— B (POWER SUPPLY) LINE

— SIGNAL LINE

— REC SIGNAL LINE

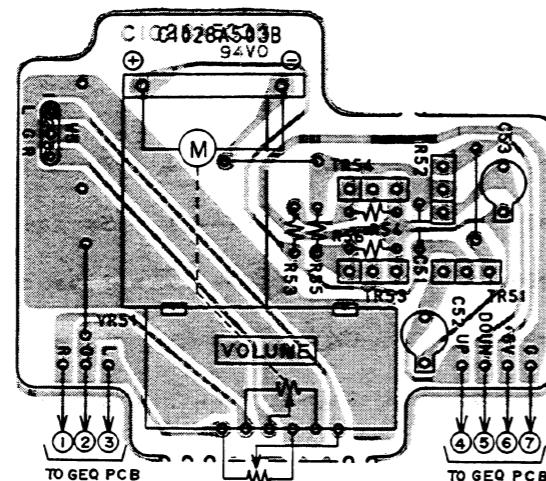
NOTE  
UNLESS  
ALL R  
ALL C



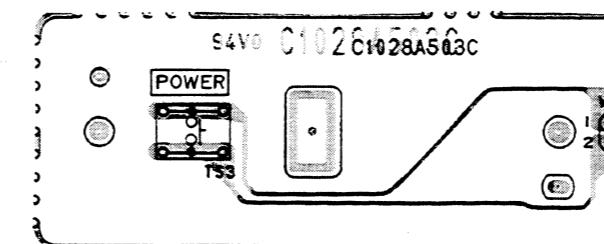
**NOTE**  
UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS IN OHMS 1/5W (J)  
ALL CAPACITORS IN  $\mu$ F 50 WV (J)

INDICATED VOLTAGES WERE  
MEASURED DURING PB MODE.  
(TAPE USED: NORMAL TYPE,  
DOLBY SW: OFF)

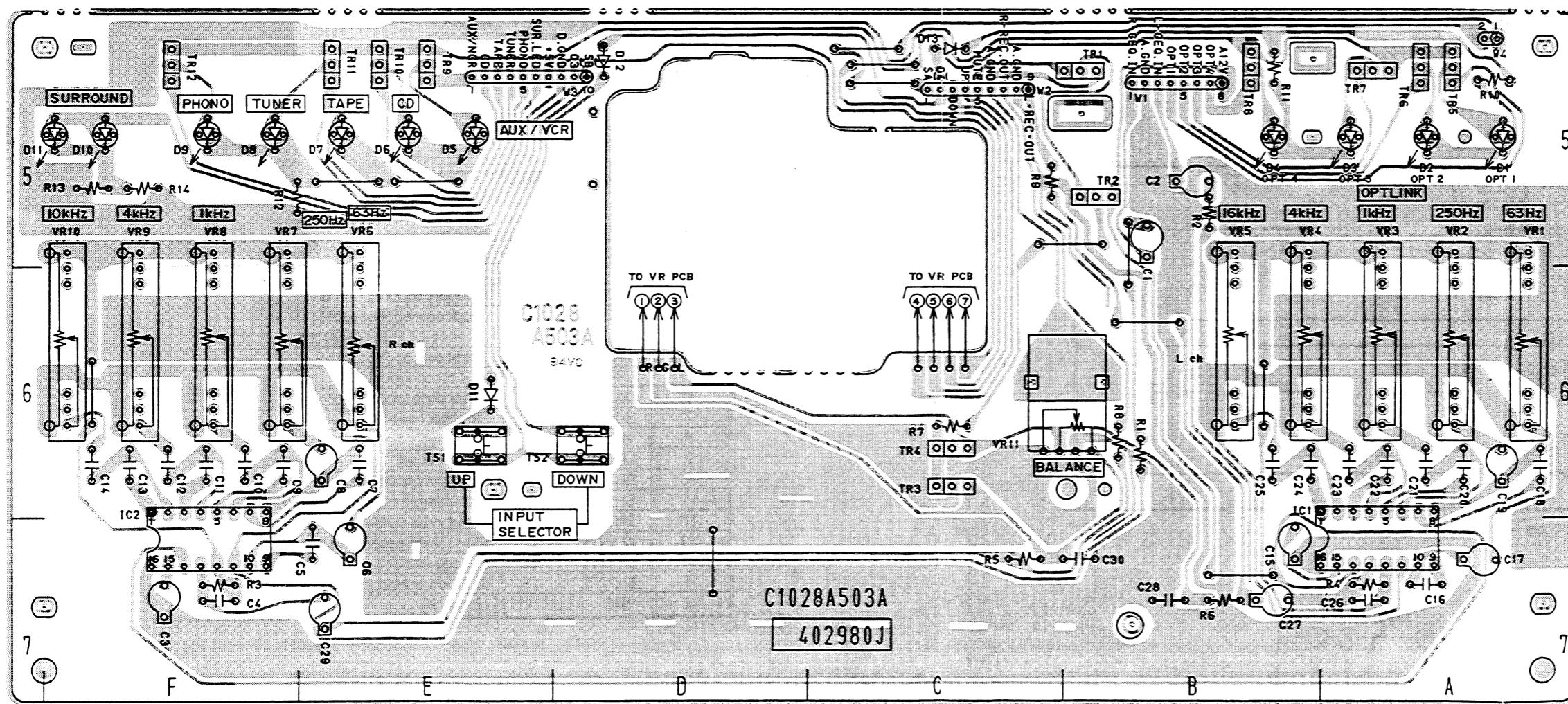
**AX-M430**  
**GEQ**  
**SCHEMATIC DIAGRAM**  
**No. 4-4 C102804M**



MAIN VR PCB CI028A503B



POWER SW PCB CI028A503C



GEQ PCB CI028A503A

#### PRINCIPAL PARTS LOCATION

ICS	
IC1	A7
IC2	F7

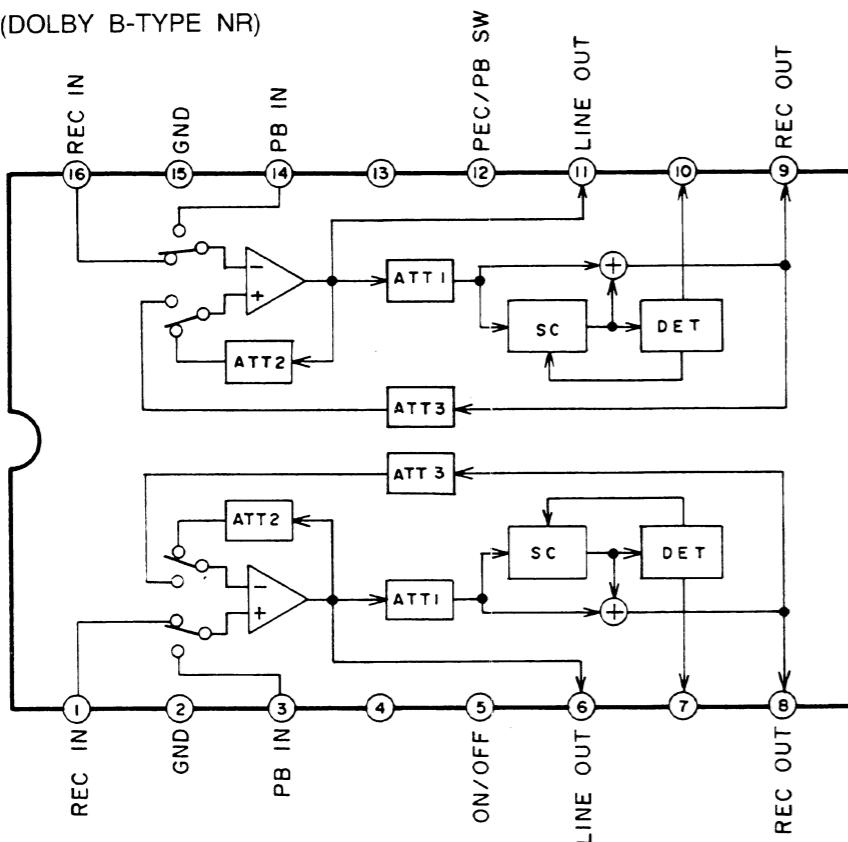
#### CONNECTORS

W1	B5
W2	C5
W3	E5

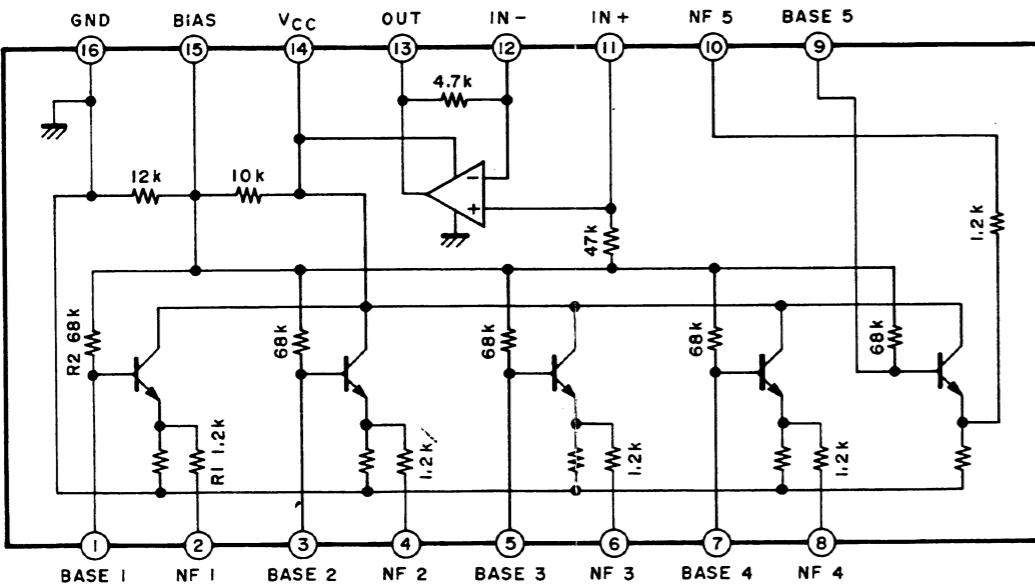
#### TRANSISTORS

TR1	B5
TR2	B5
TR3	C6
TR4	C6
TR5	A5
TR6	A5
TR7	A5
TR8	B5
TR9	E5
TR10	E5
TR11	E5
TR12	F5

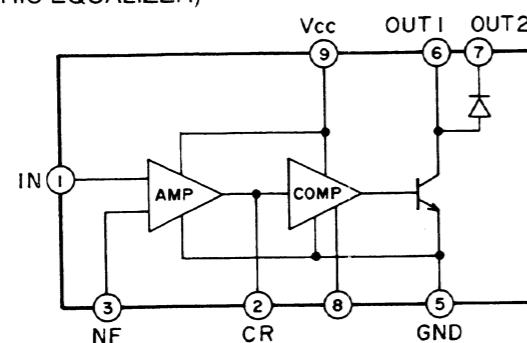
CAX1101P (DOLBY B-TYPE NR)



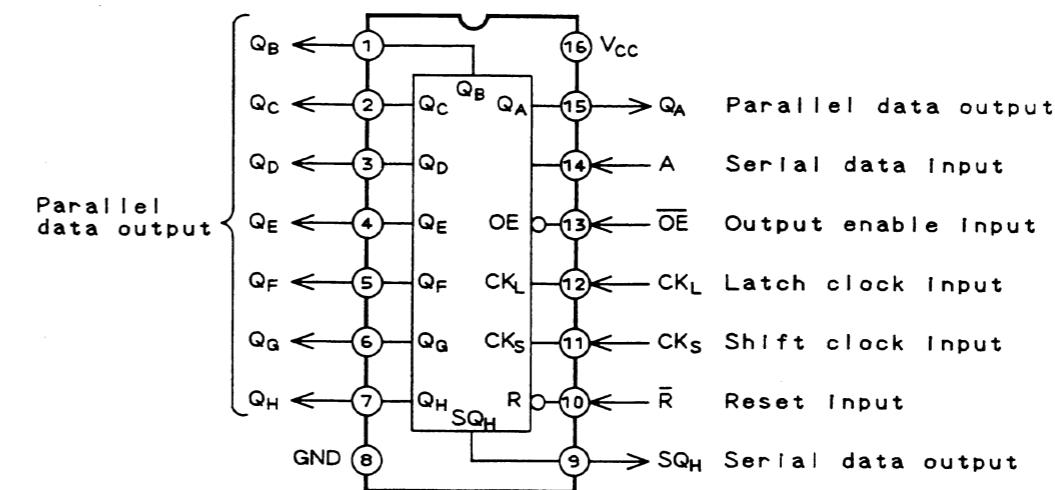
## LA2000 (AUDIO LEVEL SENSOR)



LA3600 (5 BAND GRAPHIC EQUALIZER)



## M66312P (LED ARRAY DRIVE)



PD0029 (AUDIO DIGITAL FILTER)

PIN NO	SYMBOL	I / O	DESCRIPTION
1	X IN	I	X'tal osc input
2	X OUT	O	X'tal osc output (Not used)
3	CKSL	I	Clock select H : 16.9344MHz L : 8.4672MHz
4	CKO	O	Clock output (Not used)
5	LRCK	I	L, R clock input
6	DATA	I	serial data input (MSB first)
7	BCLK	I	Bit clock input for input data
8	Vss	-	GND
9	LCO	O	Clock output for 2 DAC type (Not used)
10	SHR	O	R ch sample hold pulse output
11	SHL	O	L ch sample hold pulse output
12	D OUT	O	Serial data output (MSB first)
13	W OUT	O	Word clock output (Not used)
14	LR DO	O	L,R select clock output
15	B OUT	O	Bit clock output for data output
16	VDD	-	+B (+5 V)